Poverty Among Inner-City Children

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March, 2007

The concentration of poverty in decaying inner city neighborhoods has proven to be among the most intractable of social problems. In fact, poverty has increasingly become an urban problem: In 1979, rural poverty exceeded urban poverty, but by 1999, the situation had been reversed. In 2003, 17.5 percent of central city urban residents were poor compared to 9.1 percent in other urban areas, and 14.2 percent outside metro areas (Weinberg, 2005).

The negative effects of poverty on children can be especially pernicious, blighting lives before they really start. Brooks-Gunn and Duncan (1997) document that children who grow up in poverty suffer worse outcomes than other children. This is especially true of those who live in extreme poverty or who live below the poverty line for many years (and about 15 percent of children who ever become poor will live in poverty for at least 10 years.) Currie and Lin (2007) show that low income children are more likely than other children to suffer from virtually every type of health insult, and, perhaps as a result, are in worse overall health. Poor children are more likely than other children to suffer mental health problems including learning disabilities and developmental delays, in addition to their physical health problems. These problems in turn may be linked to higher rates of school failure, teen parenthood, and risky behaviors among poor children.

Poverty may affect child outcomes through any of a number of pathways including reduced access to medical care, poor nutrition, poor home environments (including exposure to violence and crime), and negative parenting behaviors. For example, poor children are more likely to be subject to maltreatment than other children (Currie and Tekin, 2006). The theme of this chapter is that cash benefit programs are unlikely to ever do enough to remediate the effects of child poverty. Instead, we need programs targeted to the specific problems facing poor children. City governments have a huge role to play in administering these programs, even

though they are (and should remain) largely funded by higher levels of government. City governments are close to neighborhoods and community needs, and thus perhaps in the best position to actually administer services. City governments can also be leading advocates for federal and state-level funding for programs that work. This chapter discusses what we have learned about programs that work to reduce the effects of poverty among inner-city children.

1. Changes in Poverty and in its Meaning

The earliest official measurement of U.S. poverty is from 1959. From 1959 to 1973, poverty rate fell dramatically from 22.4 percent to 11.1 percent. Since that time, it has fluctuated between 11 and 15 percent, and was roughly the same in 1970 as it was in 2000 (Weinberg, 2005). The failure to make further progress in reducing poverty over the past 30 years has led many to argue that the War on Poverty has failed—for example, Ronald Reagan famously quipped "The government declared war on poverty, and poverty won" (State of the Union address, January 22, 1988).

Yet this assessment ignores the real progress that has been made. Many new "great society" programs such as Medicaid, Food Stamps, school nutrition programs, and Head Start were introduced in the 60s, while others such as public housing were greatly expanded. These programs had a substantial impact on the nature of poverty in America which is not reflected in official statistics. Indeed, since official statistics do not include "in-kind" transfers or tax credits (which have become an increasingly important way of supporting low income families), such programs cannot have an impact on official measures of poverty no matter how good they are for families.

For example, improvements in medical care for poor children have dramatically decreased infant mortality rates. In 1960, over 25 children out of every 1,000 born died before their first birthday. By 2004, this rate had dropped to fewer than seven per 1,000. Almond, Chay and Greenstone (2004) show that in the 1960s much of this improvement was driven by improved access to hospitals for southern African-Americans. And this increase in access occurred because hospitals that wanted reimbursements from the new federal Medicare and Medicaid programs were forced to end segregationist policies. In the late 1980s and early 1990s, expansions of the federal Medicaid program led to additional declines in infant mortality (Currie and Gruber, 1996a).

More generally, Currie and Hotz (2004) show that deaths among children 0 to 19 fell more than a third between 1980 and 1998, from about 120 per 100,000 to just over 70 per 100,000. Child deaths due to medical causes, auto accidents, and other accidents all fell dramatically over this period. Since child deaths have always been concentrated among the poor, this represents a very real improvement in the lives of poor children.

There are now few cases of outright starvation among poor children. Indeed, obesity is now more of a threat. This was not always the case. In 1968, a group of physicians issued "Hunger in America," a landmark report documenting appalling levels of malnutrition among poor children. They wrote that "Wherever we went and wherever we looked, whether it was the rural south, Appalachia, or an urban ghetto, we saw children in significant numbers who were hungry and sick, children for whom hunger was a daily fact of life and sickness in many forms, an inevitability." Their report to Congress exposed shocking levels of nutritional deficiencies in areas of the United States that were comparable to those in developing countries (U.S. Congress, 1968).

The food safety net put in place has resulted in the virtual disappearance of frank starvation and childhood diseases caused by insufficient nutrient intakes and has caused us to redefine "hunger". Rather than looking for children with skeletal deformities as a result of chronic malnutrition (such as rickets), we now look for households in which members miss meals, or worry about having enough food to eat. Official statistics on "hunger" now reflect this later concept (also called "food insecurity").

As a third example, the Housing Act of 1949 called for the "elimination of substandard and other inadequate housing." Inadequate housing is still a concern for many people. Among very low income renter households with children (defined as households with incomes less than 30 percent of the area median income), 16 percent have housing with "severe or moderate physical problems." That is, their homes may be lacking complete plumbing, have unvented room heaters as primary heating equipment, or have multiple upkeep problems such as water leaks, open cracks, or rats. But even among these very low income households, over 80 percent are now in housing that is physically adequate (U.S. Department of Housing and Urban Development, 1998).

Advocates for the poor often seem reluctant to acknowledge the progress that has been made, perhaps for fear of encouraging complacency. Yet, failure to acknowledge the gains that have been made results in the common view that urban poverty is a completely intractable problem. Still, while we have come a long way, there is still a long way to go. For example, the one cause of death which has shown little downward trend among children is deaths due to intentional injuries. While the number of violent child deaths has stayed relatively constant over time, the fraction of all deaths accounted for by violence has grown, which may account for the public perception that there is increasing violence against children.

2. Programs to Address Child Poverty and its Effects

a) Cash Programs

The most obvious approach to alleviating child poverty is to give poor households with children money. This is in fact what most other western countries do and what was done in the United States under the Aid to Families with Dependent Children (AFDC) program. The shortcomings of AFDC have been extensively documented. On the one hand benefits were set by the states and most states did not provide enough money to raise families above the poverty line. On the other hand, it created many perverse incentives: Given that a mother's benefits were reduced with every dollar that she earned, and that she was likely to be cut off altogether if she married, the program discouraged mothers from working and marrying. In 1996, these shortcomings led to the demise and replacement of the program with the Temporary Assistance for Needy Families (TANF) program which emphasizes work incentives and has resulted in a sharp decline in the welfare rolls.

From 1996 to 2002, the welfare caseload declined from 12,645,000 to 5,146,000 recipients. The fraction of all U.S. children on TANF plummeted from 12.5 to 5.3 percent in only six years. Studies find that between 30 and 60 percent of the decline in welfare participation was due to welfare reform (c.f. Grogger et al, 2002). The caseload decline was accompanied by a dramatic increase in employment among single mothers. The employment rate for single mothers with children under six went from 52.5 percent in 1995 to 67.5 percent in 2001. At the same time, poverty rates for female-headed households fell, from 36.5 percent to 28.6 percent. For black and Hispanic families, the declines were even steeper: from 48.2 to 37.4 percent and from 52.8 to 37.8 percent, respectively (Smolensky and Appleton, 2003).

Children who are on welfare or who have been on welfare almost always remain worse off than other children. This does not necessarily mean, however, that welfare has failed them. Without welfare, their situation might have been even worse. Levine and Zimmerman (2000) showed that children who spent time on AFDC scored lower than other children on a range of tests, but that this difference disappeared when the test scores of their mothers were controlled for, suggesting that welfare had little effect either positive or negative. Similarly Zimmerman and Levine (1996) argue that children of welfare mothers were more likely to grow up to be welfare mothers mainly because of other characteristics of the household they grew up in.

Given that research has shown little evidence of positive effects of cash welfare on children, it is not surprising that the literature evaluating welfare reform has produced similarly null findings. The National Research Council (Smolensky and Appleton, 2003) concluded that "no strong trends have emerged, either negative or positive, in indicators of parent well-being or child development across the years just preceding and following the implementation of [welfare reform]."

Conditional tax credits represent an alternative approach to providing income to poor families. The early years of the Clinton administration saw a huge expansion of the Earned Income Tax Credit (EITC). The number of recipients grew from 12.5 million families in 1990 to 19.8 million in 2003, and the maximum credit grew from \$953 to \$4,204. The rapid expansion of this formerly obscure program run through the tax system has resulted in cash transfers to low-income families which are larger than those that were available under welfare. Gunderson and James Ziliak (2004) estimate that the EITC accounted for half of the reduction in after-tax poverty that occurred over the 1990s (the other half being mainly accounted for by strong economic growth).

The EITC is a tax credit available to poor working families. Its essential feature is that it is "refundable"—in other words, a family whose credit exceeds their taxes receives the difference in cash. The size of this refundable part of the credit relative to other transfers is shown in Table 1. Hence, the EITC is like welfare in that it gives cash payments to poor families. But EITC recipients need to work and file tax returns in order to be eligible. The size of the payment increases with earnings up to a maximum level before being phased out, so that it creates an incentive to work among the poorest households (though it also creates work disincentives for households in the phase-out range).

The credit is set at a level high enough that a family with one earner working full time is raised above the poverty line. In 2003, 19.8 million families received an average credit of around \$1,784. Eighty-nine percent of this money went to tax payers with income less than \$30,000. The EITC raises many families above the poverty line, as it was intended to do. The EITC has resulted in dramatic increases in the employment of single mothers (Eissa and Leibman, 1996; Meyer and Rosenbaum, 2001). Grogger (2003) shows that the expansion of the EITC raised the incomes of many women enough to make them ineligible for welfare.

There are however, several downsides to the EITC. Because it is part of the tax code, the EITC is complicated and many poor families do not fully understand the provisions that apply to them (Romich and Weisner, 2000). These families often end up paying some of the credit to commercial tax preparers. Kopczuk and Pop-Eleches (2007) show that participation in the EITC rose dramatically with the introduction of electronic filing, because it gave commercial tax preparers an incentive to aggressively court this market. On the positive side, perhaps because help from paid preparers is available, the take up of the EITC by eligible families has been high, especially relative to that of other anti-poverty programs (Scholz, 1994).

Berger, Paxson, and Waldfogel (2007) explore the relationship between family income, home environments, and child mental health outcomes (and cognitive test scores) at age three in the "Fragile Families and Child Wellbeing Study". This study is following a cohort of 5,000 children born in several large U.S. cities between 1998 and 2000, and over-samples births to unmarried couples. Presumably we think income matters because it affects something about the home environment. Berger et al. show that all of the measures they examine (which include measures of parenting skills as well as physical aspects of the home) are highly related to income. Moreover, controlling for these measures reduces the effects of income on outcomes considerably. The effects are small enough that they imply that even cash subsidies that brought every family up to the poverty line would not eliminate gaps in child outcomes. If we want to help disadvantaged children realize their potential, it will be necessary to have other strategies.

Dahl and Lochner (2005) provide the most recent and compelling evidence that cash may matter—they use expansions of the Earned Income Tax Credit as instruments for household income and find that each thousand dollars of income improves childrens' test scores by 2 to 4 percent of a standard deviation. An attractive feature of the changes in the EITC is that households may well have regarded them as permanent, so this experiment may approximate the effects of changes in permanent, rather than transitory income. Their result implies however, that it would take on the order of a \$10,000 transfer to having an educationally meaningful effect on test scores, so that the result is not inconsistent with that of Berger et al.

b) In-Kind Programs

¹ Even so, the estimates are likely to overstate the effect of income, because there may be other factors, such as ambition or enterprise, that are correlated with income. If we could control for these unobserved factors, one would expect the estimated effect of income to fall even further.

By 2002, only \$31.5 billion, or 15.9 percent of the approximately \$198 billion that was spent on assistance for families with children was spent on cash welfare payments (TANF payments plus OASDI), while only 20 years earlier the comparable figure had been 52 percent. Table 1 shows how federal in-kind aid grew over time, program by program.

Ziliak (2004) looks at the fraction of the "poverty gap" that is filled by safety net programs. The poverty gap is defined as the difference between the poverty line, and the average income of poor families. He finds that on average, anti-poverty programs filled a little more than 55 percent of the gap in 2001. This fraction is little changed since 1991, suggesting that declines in welfare have been made up by transfers from other programs.

These figures show the importance of programs other than traditional cash welfare in supporting low income families. A brief description of each of the major in kind programs shown in Table 1 follows.²

Medicaid

Medicaid is the main public health insurance program that covers poor women and children, along with those who are disabled and some elderly. Slightly less than half of Medicaid recipients are children, while another fifth are low-income women. Yet, although they account for three quarters of the recipients, women and children account for only about a quarter of Medicaid expenditures. The lion's share of the spending is on the elderly and disabled. For example, in 2000 the government spent \$1,237 per child on Medicaid compared to \$11,928 per elderly adult. By 2003 the cost of Medicaid had grown to \$280 billion dollars, which means that even the fraction of those dollars devoted to women and children (about \$44.6 billion) dwarfed the approximately \$16 billion per year spent on traditional cash welfare under the TANF

² See Currie (2006) for further details about these programs.

program. We can also compare spending for mothers and children to the huge expenditures made under the Medi*care* program. Medicare, the main public health insurance program for people over 65, cost \$239 billion in 2003 (Committee on Ways and Means, 2004; Centers for Medicare and Medicaid Services, 2002).

The costs of Medicaid are shared by states and the federal government. To receive their federal "match," states are required to run the programs within certain guidelines, which used to require that families be on welfare. Beginning in the mid-1980s, the federal government progressively increased the income cutoffs for the program, first giving states the option to cover additional groups and then requiring it. By 2001 all poor children were eligible for Medicaid, a remarkable legislative accomplishment. In addition the State Child Health Insurance Program (SCHIP) funded in 1997 had extended eligibility to an additional 1.2 million children by April 1998 (Associated Press, 1998).

Legislators also targeted pregnant women. By April 1990, new guidelines required that all states wishing to participate in the Medicaid program cover pregnant women (and children under 6) with incomes up to 133 percent of the poverty line. States also had the option of receiving matching funds to cover women with incomes up to 185 percent of the poverty line.

Through this combination of carrots and sticks, states were all gradually brought up to the same, more generous, standard. But given that they started at different levels and took up the expansion options at different rates, income thresholds for Medicaid eligibility varied wildly across states in the intervening years. For example, in Texas, only 3 percent of pregnant women would have been eligible for Medicaid coverage in 1979, while half were eligible by 1992. In contrast, in more generous states like New York, a quarter of women were eligible in 1979, while again, half were eligible by 1992.

Currie and Gruber (1996a,b) construct an index of Medicaid generosity which depends only on state rules, and use it as an instrument for Medicaid eligibility. They show that the 30 percent increase in the eligibility of pregnant women that took place during the 1980s and early 1990s was associated with an 8.5 percent decline in the infant mortality rate. The roughly 15 percent increase in Medicaid eligibility for children that occurred over the same period reduced the probability that a child went without any doctor visits during the year by 9.6 percentage points. Roughly 20 percent of children receive no doctor visits at all in a given year, although it is recommended that children receive at least an annual check up. Their results suggest that this number would have been closer to 30 percent in the absence of the Medicaid expansions, so that as many as six million children gained a doctor's visit. They also found a significant increase in the fraction of those visits that took place in doctor's offices. Similarly, Aizer (2003) and Dafny and Gruber (2000) find that increases in eligibility for Medicaid and Medicaid enrollments reduced preventable hospitalizations, suggesting that children gained access to necessary preventive care.

These studies show that extending Medicaid has had important positive effects on child health. Medicaid also has a major impact on poor children who are not covered, by sustaining providers who provide indigent care, and by allowing providers to bill Medicaid for care of children who are eligible but uncovered at the time of service.

However, many problems remain. Twenty percent of U.S. pediatricians refuse to see Medicaid patients at all, and 40 percent limit the number of Medicaid patients in their practices, largely because Medicaid pays less than private insurance companies (Yudkowsky et al., 1990). Children on Medicaid are more likely than uninsured children to have a usual source of care, and to receive routine care on an appropriate time frame, but they are less likely than privately

insured children to be seen in doctor's offices rather than clinics or emergency rooms. Children on Medicaid are less likely to see specialists than other children--54 percent see a general practitioner compared to 34 percent of non-Medicaid children, and may have visits that are up to 40 percent shorter (relative to the average visit time of 13 minutes) than non-Medicaid children (St. Peter et al, 1992; Decker, 1992). An additional problem is that it is often difficult for parents to maintain continuous coverage for their children, given the need to reapply at frequent intervals, and fluctuations in family income. And although rates of private health insurance coverage have been declining for most non-elderly groups, Medicaid expansions may have hastened the decline among families with children (Cutler and Gruber, 1996; Gruber and Simon, 2007).

Medicaid's largest problem however, is rising costs. Macurdy et al. (2005) show, for example, that in California, costs are likely to rise from 30 billion in 2003 to 80 billion in 2015. But these costs are extremely unevenly distributed: Sixty percent of the Medicaid expenditures are on 5 percent of the population, and these people are overwhelmingly elderly and disabled. Seventy-five percent of the Medicaid population, including most child enrollees, incur less than 6 percent of the costs. These facts about Medicaid show that cutting children from the rolls, as many states have done in response to budget crises, is likely to have very little impact on Medicaid costs.

Food and Nutrition Programs

One in five Americans uses a federal food program every day. The creation of the food safety net began in earnest in 1946 with the creation of the National School Lunch Program.

The "Hunger in America report" was followed by an expansion of the food safety net. The Food

Stamp Program (FSP) which had begun as a small pilot in 1961, was greatly expanded over the next 16 years. By 1974, states were required to extend the program statewide rather than offering it only in selected counties. WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children) was established in 1972 to provide nutritious food to pregnant women, infants, and preschool children. The National School Lunch Program (NLSP) was expanded as was the School Breakfast Program (SBP) which had begun in 1966 as another pilot program. Ten years after their initial report rocked the nation, the authors of "Hunger in America" went back to the inner cities areas and found that while the poverty was still there, the widespread malnutrition was gone (U.S. Congress, 1979).

Now we are bombarded with stories about an epidemic of obesity in the United States. The 2001 Surgeon General's report (U.S. Dept. of Health and Human Services, 2001) shows that obesity has been rising more quickly among children than among adults, and that poor children are at greater risk than others. In future, more children are projected to die from complications of obesity than from smoking. Bhattacharya, Currie and Haider (2004) show that in a national sample, poor, food insecure teens are almost twice as likely to be obese as teens who are neither poor nor food insecure (18.1 percent compared to 10.8 percent). One study of homeless people in a New York City shelter found that 39 percent were obese (Luder et al., 1990). The relationship between poverty, food insecurity, and obesity means that it is more important than ever to ensure that safety net programs deliver nutritious foods rather than simply adding calories to the diet.

The Food Stamp Program (FSP) is by far the largest federal food program with 19.1 million recipients in 2002 and expenditures of 24.1 billion. The FSP is also the most similar to a cash welfare program because there are few restrictions on the types of food that can be

purchased, and because the amount that most households receive in FSP benefits is less than the amount of their food budgets. This means that the bulk of the FSP benefits are likely to be used to buy food the household would have purchased in any case and that the money saved by using the food stamps can then be spent on other things (such as housing).

Several food stamp "cash out" demonstrations have asked whether people actually treat food stamps the same as cash. In these experiments households were issued checks instead of food stamps. Whitmore (2002) reexamined data from an experiment in San Diego and finds that the majority of households received food stamps worth less than their food budgets, and treated them like cash. Only households that initially received more in food stamps than they wanted to spend on food increased their food consumption, and much of this increase was spent on items such as soda with little nutritional value.

It is clear that the FSP has not eliminated nutritional problems. The National FSP Survey of 1996 found that 50 percent of FSP participants experienced food insecurity and substantial numbers of FSP recipients fell short of the recommended daily allowances for important nutrients--31 percent of FSP households were short of iron, while 21 percent were short of folate (Cohen et al., 1999). At the same time, FSP participants are more likely to be obese (Bhattacharya and Currie, 2000). The problem may be that, as discussed above, FSP participants are free to use their benefits to buy foods of little nutritional value.

Still, Bhattacharya and Currie (2000) find that controlling for characteristics such as age of household head, education, race, and household structure, teenage FSP participants are less likely to be food insecure. Similarly, Basiotis et al. (1998) and colleagues have found that the incidence of food insecurity decreases with the size of the FSP benefit that a household is

eligible to receive. These findings suggest that the FSP may not improve the quality of the diet, but does perhaps smooth consumption.

Finally, it is important to note that the FSP is the closest thing that the U.S. has to a universal safety net program because anyone who meets the income requirements is eligible. Most other programs have some sort of "categorical" restriction, i.e. rules such that only certain categories of people are eligible. Even programs such as unemployment insurance serve only a minority of the unemployed because of requirements that people work a certain amount before they can qualify. Thus, the FSP has an importance beyond any direct impact on nutrition as a program that serves families that somehow "fall through the cracks" of other programs.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

If the FSP is similar to cash, then the WIC program is at the opposite end of the spectrum. WIC offers coupons that can be redeemed only for specific types of food by eligible women and children who are certified to be at nutritional risk. These foods are chosen to meet the nutritional needs of the caseload of pregnant and nursing women, infants, and children under five and are good sources of protein, iron, calcium, and vitamins A and C. The monthly value of WIC benefits is small compared to food stamps—in 2005 the average was about \$37 per month. WIC agencies are also required to help participants obtain preventive health care either by providing services on-site, or through referrals. WIC is widely available both because the income cutoffs are higher than for food stamps (at 185 percent of the poverty line) and also because Medicaid recipients are automatically eligible for WIC, and many states have raised Medicaid cutoffs for pregnant women, infants and children above the WIC cutoff. Bitler, Currie,

and Scholz (2003) find that in any given month of 1998, 58 percent of infants and children under five were eligible for WIC.

WIC is the most studied federal food program and the evidence shows that "WIC Works". In 1992, the U.S. General Accounting Office (U.S. General Accounting Office, 1992) reviewed 17 studies of the effects of prenatal WIC participation on newborns. All 17 found that WIC participation reduced the incidence of low birth weight (birth weight less than 2,500 grams) by between 10 and 43 percent, and that it reduced the incidence of very low birth weight (birth weight less than 1,500 grams) between 21 and 53 percent. According to the GAO, providing WIC services to mothers of babies born in 1990 saved federal tax payers more than \$337 million in medical costs so that a dollar invested in WIC saves at least \$3.50 in other costs. Since the GAO evaluation, many other studies have reported similar positive findings (c.f. Ahluwalia et al, 1992; Brown et al. 1996; Gordon and Nelson, 1995; Devaney 1992).

Concerns have been raised however, that positive results are driven by the way that mothers are selected into the program. If mothers who signed up for WIC had better characteristics than those who did not then perhaps they would have had healthier babies in any case. Direct investigation of how WIC mothers differ from other eligible mothers should allay these concerns. Bitler and Currie (2004) examine detailed information about women whose deliveries were paid for by Medicaid and find that those on WIC were worse off in every observable dimension than those who were not. Burstein et al. (2000) found that WIC mothers scored lower on a test of coping skills than other low-income mothers. If anything then, selection would cause WIC mothers to have less healthy babies on average than other mothers, which makes the finding of positive WIC effects all the more remarkable. One especially notable study by Duncan and Kowaleski-Jones (2002) compare siblings in pairs in which one

participated in WIC prenatally and one did not, and finds that participation in WIC increases birth weight by 7 ounces. Comparing siblings offers a powerful way to control for common aspects of family background.

While the provision of WIC to pregnant women is a great success story, the effects of WIC on infants and children are less well studied. One downside to WIC is that it discourages breast feeding by giving away free formula. Although WIC centers are required to teach pregnant women that "breast is best" the net effect of WIC on breast feeding has been negative. A simple solution to this problem would be to make it more difficult for women to receive formula. But such a policy could back-fire because if women are not going to nurse their babies, then WIC insures that the babies get proper formula and infant cereal. Instead of making it difficult for women to get formula, WIC agencies have intensified efforts to encourage breast-feeding by increasing the value of packages given to nursing mothers (among other measures). Chatterji and Brooks-Gunn (2004) suggest that these efforts may be paying off, since they do not find any negative effect of WIC on breastfeeding in recent years.

WIC increases the consumption of the target nutrients that are included in the foods WIC participants are allowed to purchase (Rose et al., 1998) and WIC has been credited with a dramatic decline in the incidence of anemia among young children from 7.8 percent to 2.9 percent in the ten years following the introduction of WIC (Yip, et al. 1987). Some studies indicate that these improvements in nutrition affect children's behavior and ability to learn. Children on WIC prenatally have been found to have higher scores on the Peabody Picture Vocabulary Test, which is a good predictor of future scholastic achievement (Kowalski-Jones and Duncan, 2000).

School Nutrition Programs

School nutrition programs fall between WIC and the FSP in terms of expenditures, the extent to which they target particular groups, and the emphasis on supplying only nutritious foods. School nutrition programs provide free or reduced price meals to low income children in schools. Like the FSP, both the National School Lunch Program and the School Breakfast Program are entitlement program, which means that every eligible person must be served. Almost all public schools participate in the lunch program, and about four out of five schools that offer lunch also offer a school breakfast. Every day, 6.7 million children receive a free or reduced price school breakfast, while 16 million receive a free or reduced price school lunch.

School meals programs work by reimbursing schools a small amount for the meals that are served. Children with incomes less than 130 percent of poverty (the same cutoff as the FSP) are eligible to receive free meals, and the school gets reimbursed \$2.19 for each lunch, and \$1.17 for each breakfast; children with incomes between 130 and 185 percent of poverty (the cutoffs for the FSP and WIC) can be charged no more than \$.40 for lunch and \$.30 for breakfast. Schools get reimbursed \$1.79 for each reduced price lunch and \$.87 for each reduced price breakfast. Schools can be reimbursed a small amount (\$.22 per meal) for serving students with incomes higher than these cutoffs.

Unlike the FSP which can be used to purchase even junk food, in principle, school meals must follow government approved meal plans. Since 1995, meals have been required to follow the <u>Dietary Guidelines for Americans</u>. Critics from the left and right have roundly criticized school meals for failing to live up to this standard. The government's own studies paint a rosier picture. School meals provide the vitamins and minerals that children need for a healthy diet, and while many schools fail to meet the targets for fat and saturated fat, they are much closer

now than they were before the new standards were implemented. Many American children at all income levels have diets that fall far short of the Dietary Guidelines for Americans, so that the food in school meals may be significantly better than the food children would eat otherwise.

Devaney et al. (1993) examine data from 1991-1992, before the new dietary guidelines went into effect and find that the average child who ate school lunch on the day he or she was surveyed ate the same number of calories as the average child who did not, and was more likely to consume many target nutrients. Bhattacharya and Currie (2000) compared children eligible for school lunch to those were not, when schools were in and out of session and found that school lunch was associated with reductions in blood cholestoral and improvements in diet quality. Hofferth and Curtin use data from the 1997 Panel Study of Income Dynamics (collected after the new guidelines went into effect) and find no evidence that school nutrition programs contribute to overweight when differences between families and children are accounted for.

However, Whitmore (2005) examines data on kindergarten and 1st graders from 1995-1996, right around the time the new meal guidelines came in, and finds that students who start out at the same weight as other students but ate lunch at school in kindergarten were about two percentage points more likely to be overweight in first grade. Part of the discrepancy between these studies may lie in the definition of "school lunch". Many schools now have a la carte and vending machine items which do not comply with school nutrition program regulations.

The School Breakfast Program is less controversial. It improves children's nutrition by increasing the consumption of vitamins and minerals and reducing the percentage of calories from fat (Bhattacharya, Currie, and Haider, 2006). Studies have examined the impact of school breakfast on children's academic achievement by measuring the same children before and after

school breakfast became available at their schools. These studies find that school breakfast improves both attendance and test scores (Myers et al., 1989; Murphy et al., 1998).

Housing Programs

The Housing Act of 1937, which began federal housing programs, was enacted in order to "remedy the acute shortage of decent, safe, and sanitary dwellings." The Housing Act of 1949 called for the "elimination of substandard and other inadequate housing." Clearly, the primary focus of early legislation was on the quality of the individual housing units. Housing policy has been successful in greatly reducing the number of substandard units so that even among very low income households with incomes less than 30 percent of the area median income, over 80 percent are in housing that is physically adequate. However, over 70 percent of these households pay more than 30 percent of their income in rent and utilities and 40 percent pay more than 50 percent of their income for these basics (U.S. Dept. of Housing and Urban Development, 1992). Hence, in recent years the focus of policy has been on reducing this rent burden.

Public housing programs are among the costliest and least popular government interventions in urban areas. For many, the words "public housing" have become identified with crime and decay. But public housing is incredibly heterogeneous: Approximately 3,300 public housing authorities own and operate 13,200 developments with a total of 1.4 million units. Large "projects" represent the most visible "face" of public housing, but they account for less than a quarter of the almost \$50 billion the federal government spends on housing programs for low income people, and no new projects have been built for over 25 years.

Two other types of programs assist renters. (See Olson, 2003 and The Millenium Housing Commission, 2002 for overviews of project based aid and other programs to assist

renters). The first subsidizes the construction or rehabilitation of low-income housing. The most rapidly growing federal housing program is the Low Income Housing Tax Credit (LIHTC) which offers tax credits to builders who set aside a fraction of their units to be rent restricted and occupied by low income households. Since 1987, about 1.1 million units have been built under LIHTC, and the annual \$5 billion in funding for this program produces about 100,000 new units yearly.

The third type of assistance available to renters is a "Section 8" voucher. Whether families live in projects or receive vouchers, their rent is capped at 30 percent of their income. Families with vouchers find housing on their own that meets certain conditions (the rent must be less than a specified "fair market rent" and minimum housing standards must be met). The government pays the landlord the difference between the market rent and 30 percent of the family's income.

In 2002, About 1.3 million families lived in public housing projects, almost 2 million received Section 8 vouchers, about 800,000 lived in units subsidized under mostly discontinued builder-subsidy programs, and a further million lived in housing funded under the LIHTC.

Despite the bad reputation of public housing, huge waiting lists show that demand far outstrips supply. In New York City, as of March 31, 2004, there were 142,514 families on the waiting list for conventional public housing, 129,551 families on the waiting list for vouchers, and 28,582 families on both waiting lists (New York City Housing Authority, 2004). When the waiting list for Section 8 recently opened in February 2007 after being closed for 12 years, the housing authority received almost 500,000 applications within three months. In Los Angeles, the average wait for family housing is three years (Los Angeles County Community Development Commission, undated). In Chicago, Boston and Philadelphia, families can't even get on the

waiting list for Section 8 because the lists have been closed—too many families are already waiting (Boston Housing Authority, undated; Chicago Housing Authority, 2003; Philadelphia Housing Authority, 2004).

Waiting lists and closures of waiting lists illustrate the main problem with federal low-income housing programs: Lucky families win the waiting-list lottery and receive a big subsidy. Unlucky families can't even get on a waiting list. In contrast, Medicaid and most nutrition programs are entitlement programs available to all eligible families. Despite the fact that we spend almost as much on housing programs as on medical care for poor women and children, most poor people get no housing assistance. Only 30 percent of poor renters are served (U.S. Department of Housing and Urban Development, 1992).

More families could be served with existing resources. Estimates suggest that it costs at least 35 percent and perhaps as much as 91 percent more to house a family through the construction or rehabilitation of housing rather than through Section 8 vouchers. Public housing project residents could be given vouchers that they could use either to stay in their current locations (though some of the worst housing projects would not even meet Section 8 standards) or move elsewhere.

Olson (2003b) calculates that switching all project-based aid to vouchers would allow 900,000 more families to be served. In fact, by switching to an all-voucher policy and lowering the subsidy level, we could create an entitlement program that served all of the poorest families at the same cost as current housing policies. Cutts and Olsen (2002) calculate that the payment standard exceeded the minimum subsidy necessary to rent an apartment by a median of 68 percent in 2001. So payment standards could be lowered by a considerable amount and the poorest families would still be able to find units meeting Section 8 standards. A possible

problem with vouchers in very tight housing markets is that having more dollars chasing a fixed number of units is could drive up rents. However, vouchers may also increase the supply of low-income housing if landlords are enticed to bring units up to Section 8 standards in order to participate in the program.

Current public housing construction programs such as LIHTC and HOPE VI are also more expensive than vouchers (Wallace et al. 1981; Olsen and Baron, 1983; Schnare et al. 1982; U.S. General Accounting Office, 2001). And many households with incomes less than 30 percent of the area median income cannot afford to live in LIHTC sponsored units unless they also receive vouchers (the Center on Budget and Policy Priorities, 2000). Moreover, new construction under the LIHTC program may crowd out private provision of affordable housing. Murray (1999) finds that while conventional public housing adds to the stock of affordable housing, subsidizing the construction of moderate income housing has less impact.

One of the main rationales for subsidizing mixed income housing through programs such as LIHTC is the idea that such programs improve neighborhoods. The importance of neighborhoods may seem self-evident but there is actually intense debate among social scientists about whether neighborhoods have an effect on children over and above the influence of their own families. Wilson (1987) argued that the increasing concentration of poor black children in neighborhoods with few positive role models has had devastating consequences. Jobs have moved away from poor neighborhoods so that "spacial mismatch" makes it difficult for the poor to find work. On the other hand, people who move into a given neighborhood differ from those in other neighborhoods before they arrive, and those who leave differ from those who stay. So even if it appears that children from bad neighborhoods do worse than other children, one cannot assume that it is the neighborhood rather than the family that matters.

The most careful studies have found surprisingly little negative effect of living in projects (or alternatively, surprisingly small positive effects of moving out of them). Currie and Yelowitz (2000) find that families that had a boy and a girl are more likely to live in public housing than those with two same-sex children, because they are entitled to larger apartments. Using this finding as a way to separate the effect of living in public housing from the effect of being in a poor family, they find that children in projects were 11 percent less likely to have repeated grades than other similar children, and that they lived in housing that was less crowded. Surprisingly, given the stereotype of large public housing projects, the children in public housing were also less likely to live in buildings with 50 or more units than other similar children.

Jacobs (2004) studies students displaced by demolitions of the most notorious Chicago high-rise projects. Congress passed a law in 1996 that required local housing authorities to destroy units if the cost of renovating and maintaining them was greater than the cost of providing a voucher for 20 years. Jacobs argues that the order in which doomed buildings were destroyed was approximately random. For example, in January 1999, the pipes froze in some buildings in the Robert Taylor Homes, which meant that those buildings were demolished before others in the same complex. By comparing children who stayed in buildings scheduled to be demolished to others who had already been displaced by demolitions, he obtains a measure of the effect of living in high-rise public housing. Despite the fact that the high rises in Jacob's study were among the most notorious public housing projects in the country, he finds very little effect of relocation on children's educational outcomes.

The most exhaustive examination of the effects of giving vouchers to project residents is an ongoing experiment called "Moving to Opportunity" (MTO). MTO was inspired by the Gautreaux program in Chicago, which resulted from a consent decree designed to desegregate

Chicago's public housing by relocating some black inner-city residents to white suburbs. A series of studies by James Rosenbaum (c.f. Rosenbaum et al. 1986, 1992, 1995) found large positive effects of relocation on children and their mothers. However, limitations such as high attrition from the study cast some doubt on these findings.

MTO is a large-scale social experiment that is being conducted in Chicago, New York, Los Angeles, Boston and Baltimore (see Orr et al. 2003). Between 1994 and 1998, volunteers from public housing projects were assigned by lottery to one of three groups. The first group received a voucher that could only be used to rent housing in a low-poverty area (a Census tract with a poverty rate less than 10 percent). This group also received help locating a suitable apartment. I will call this the MTO group. The second group received a normal Section 8 voucher which they could use to rent an apartment in any neighborhood. The third group was the control and received no vouchers or assistance although they were eligible to remain in their project apartment.

Families in the first group did move to lower poverty neighborhoods and the new neighborhoods of the MTO group were also considerably safer. However, contrary to expectations, the move to new neighborhoods had positive effects on girls but had either no effect, or negative effects, on boys. Girls in the MTO group were more likely than controls to graduate from high school and were much less likely to suffer from anxiety. Girls in the regular Section 8 group also experienced improvements in mental health relative to the controls. Finally, girls in the MTO and Section 8 groups were much less likely to have ever been arrested than controls. In contrast, boys in the experimental group were 13 percent more likely than controls to have ever been arrested. This increase was due largely to increases in property crimes. These boys also report more risky behaviors such as drug and alcohol use. And boys in

the MTO and voucher groups were more likely to suffer injuries. These differences between boys and girls are apparent even within families (Orr et al., 2003). These results indicate that moving boys from housing projects to wealthier neighborhoods is not a panacea.

It remains to be seen how the long-term outcomes of the MTO children will differ from controls. Oreopoulos (2003) uses data from Canadian income tax records to examine the earnings of adults who lived in public housing projects in Toronto as children. There are large differences between projects in Toronto, both in terms of the density of the projects, and in terms of the poverty of the neighborhoods. As in the Gautraux project, the type of project a family lives in is approximately randomly assigned because the family is offered whatever happens to be available when they get to the top of the waiting list. Oreopoulos finds that once the characteristics of the family are controlled, the neighborhood has no effect on future earnings or on the likelihood that someone works.

Overall these results suggest that despite the popularity of the idea among urban planners, moving poor children to mixed income neighborhoods may have relatively little impact on their prospects. Hence, one of the major rationales for favoring programs such as LIHTC over voucher programs that could serve more families with the same budget may be invalid.

A number of other arguments are often advanced against voucher programs. First, some families have difficulty using vouchers and return them unused. But the fact that some vouchers are returned does not mean that any are wasted because the number of families that are allowed to search at any point in time is greater than the number of vouchers. For example, if only 50 percent of searchers were expected to be successful in a given search period, a housing authority could make sure that all of the vouchers were used by authorizing twice as many people to search as they had vouchers for. Most housing authorities also have a reserve fund to

ensure that everyone who successfully finds an apartment is able to rent it. This system works well enough that, at any point in time, most available vouchers are being used (Kennedy and Finkel, 1994).

Similarly, low vacancy rates in a particular housing market don't mean that voucher recipients won't be able to find housing. Many voucher recipients are able to use their vouchers to stay in their existing apartments. Kennedy and Finkel (1994) examine data from 33 housing authorities and found that 30 percent of voucher recipients stayed in the apartments they were in. Forty-one percent of these apartments already met Section 8 standards and the rest were repaired to meet the standards. Of the 70 percent of recipients who moved to new apartments, about half moved into apartments that were upgraded to meet Section 8 standards. In New York City, which has a very tight housing market, only 31 percent of the apartments Section 8 recipients lived in had to be repaired to meet program standards.

In fact, greater availability of Section 8 vouchers would encourage landlords to repair existing housing. This conclusion is supported by evidence from the Experimental Housing Allowance Program. Part of this experiment involved running a voucher program for ten years in South Bend, Indiana and Green Bay, Wisconsin. Unlike Section 8 vouchers, the EHAP vouchers were available to all low income households in the counties. Landlords were motivated to fix their apartments to qualify for EHAP vouchers because given that all the low income households now had vouchers, EHAP was the only game in town. Over the first five years of the experiment, 11,000 homes were repaired to meet program standards (Cutts and Olsen, 2002).

A potential drawback to a large voucher program like EHAP is that it might drive up rents at the bottom of the market. But if the supply of low-rent apartments also increases in

response to the voucher program, then the effects on rents will be mitigated. The EHAP voucher program had little effect on market rents (Rydell et al., 1982).

Voucher programs cannot be expected to solve the problem of homelessness, which has multiple causes. Jencks' (1994) path breaking study of homelessness, found that the majority of the 300,000 to 600,000 homeless were single men with substance abuse or mental illness, not families with excessive rent burdens. Jencks argues that even this population could benefit from housing voucher programs but that other policies such as changing zoning to allow single room occupancy dwellings and restoring psychiatric hospital beds for the hard-core mentally ill are necessary to make a real dent in homelessness. Burt and Aron (2001) distinguish between people experiencing short term crises (which might be solved by preventive measures such as emergency financial aid) and the chronically homeless. For the later, they advocate transitional housing with supportive services. For both groups, they argue that programs (including rental assistance through youchers) that make housing more affordable are necessary.

Finally, while the preceding discussion emphasizes more efficient use of existing resources targeted to low-income housing, it is worth asking whether society should pay more overall for these kind of programs? An obvious comparison is to the amounts we pay to subsidize the housing of those who are better off. Tax deductions for mortgage interest, property taxes, capital gains, and investments in housing are likely to total \$120 billion per year between 2002 and 2007, with most of this money going to higher income individuals. Given the large tax expenditures on home owners, expenditures on housing for the poor are comparatively modest (National Low Income Housing Coalition, 2001).

Still, the research summarized above has made a strong case that vouchers may be preferable to project based aid on efficiency grounds. But it has not shown that children in

households with vouchers generally do any better than children living in housing projects. And the evidence that public housing of any kind (project or voucher) improves child outcomes is extremely limited, consisting of the single Currie and Yelowitz (2000) study. Thus, support for public housing rests primarily on beliefs about the importance of affordable housing to low income families.

Early Intervention

A good deal of evidence suggests that it is possible to intervene early in the lives of poor children in order to improve their outcomes. The two interventions that have been shown to be most effective are high quality child care settings, and nurse home-visiting programs, though of course programs such as WIC and Medicaid coverage beginning in pregnancy should also be thought of as forms of early intervention.

The most convincing evidence of the positive potential role of quality child care comes from experiments in which disadvantaged children were randomly assigned to a treatment group that got high quality care, and a control group that did not. These studies generally find that early intervention has long-lasting effects on schooling attainment and other outcomes such as teen pregnancy and crime, even though it often results in no lasting increase in cognitive test scores. These results point to the tremendous importance of "non-cognitive skills" (c.f. Heckman and Rubinstein, 2001) or alternatively, to the importance of mental as well as physical health in the production of good child outcomes (Currie and Stabile, 2006).

Three studies of "model" early intervention child care programs stand out because they randomly assigned children to treatment and control group, had low dropout rates, and followed children at least into middle school. The three studies are the Carolina Abecedarian Project, the

Perry Preschool Project, and the Milwaukee Project. (A fourth, the Infant Health and Development Project also used a randomized design and had few dropouts, but followed children only to age 8. A long-term follow-up is currently in the field.) Of these, only the Milwaukee Project found any long-term effect on IQ. But the Carolina Abecedarian and Perry Preschool Projects both found positive effects on schooling. A recent cost-benefit analysis of the Abcedarian data through age 21 found that each dollar spent on Abecedarian saved tax payers four dollars. And by focusing only on cost savings, this calculation does not even include the value of higher achievement to the individual children and society (Masse and Barnett, 2002). Each dollar spent on Perry Preschool has been estimated to have saved up to seven dollars in social costs (Karoly et al., 1998).

These interventions prove then, that it is possible to have an impact on the lives of poor children. However, each intervention involved a package of high quality services that was delivered to very small numbers of children. Moreover, a recent re-analysis by Anderson (2005) suggests that like MTO, the significant effects of these interventions were largely concentrated among girls. The fact that particular interventions of this type had an effect on at least some children, does not prove that the types of programs typically available to poor inner-city children will do so.

Head Start is a preschool program for disadvantaged 3, 4, and 5 year olds which currently serves about 800,000 children each year. It is funded as a federal-local matching grant program and over time, federal funding has increased from \$96 million when the program began in 1965 to \$6.2 billion in 2001. Head Start is not of the same quality as the model interventions, and the quality varies from center to center. But Head Start centers have historically been of higher average quality than other preschool programs available to low income people. This is because,

in contrast to the private child care market, there are few very low-quality Head Start programs (see Blau and Currie, 2004 for an overview).

An experimental evaluation of Head Start is currently being conducted (U.S. Dept. of Health and Human Services, 2005). The evaluation compares Head Start children to peers who may or may not be in some other form of preschool (including state-funded preschools modeled in Head Start). Even relative to this baseline, initial results show that Head Start children make some gains, particularly in terms of language ability. But the experiment follows children only into the first grade, and so will not address the important issue of whether Head Start has longer-term effects.

In a series of studies with Duncan Thomas and other colleagues, I have used national survey data to try to measure the effect of Head Start. In most of these studies, we compare the outcomes of children who attended Head Start to their own siblings who did not attend. The idea is that siblings share many common background characteristics. By choosing the child's own sibling as a control for the Head Start child, we effectively eliminate the effect of shared family background on child outcomes. We have found significant positive effects of Head Start on educational attainments among white youths, and reductions in the probabilities of being booked or charged with a crime among black youths. Test score gains for blacks and whites were initially the same, but these gains tended to fade out more quickly for black than white students, perhaps because black former Head Start students typically attend worse schools than other students.

It should also be noted that since its inception, Head Start has aimed to improve a broad range of child outcomes (not just test scores). When the program was launched in 1965, the Office of Economic Opportunity assisted the 300 poorest counties in applying for Head Start

funds, and these counties were significantly more likely than other counties to receive funds. Using a regression discontinuity design, Ludwig and Miller (2007) show that mortality from causes likely to be affected by Head Start fell among children 5 to 9 in the assisted counties relative to the others. Mortality did not fall in slightly older cohorts who would not have been affected by the introduction of the program.

Head Start has served as a model for state preschools targeted to low-income children in states such as California, and also for new (voluntary) universal preschool programs in Georgia, and Oklahoma. The best available evaluations of universal preschool programs highlight the importance of providing a high quality program that is utilized by the neediest children. Baker, Gruber and Milligan (2005) examine the introduction of a universal, \$5 per day (later \$7), preschool program in the Canadian province of Quebec. The authors find a strong response to the subsidy in terms of maternal labor supply and likelihood of using care, but they find negative effects of children on a range of outcomes.

Several caveats to the Baker, Gruber, and Milligan study are in order: First, the sample children cannot be followed very long, so it is not known, for example, whether the program had negative effects on schooling attainment. More substantively, because poor children were already eligible for subsidies, the marginal child affected by this program was a child who probably would have stayed home with their middle-class, married, mother, and instead was put into child care. Moreover, the marginal child care slot made available by the program was low quality—the province placed much more emphasis on making slots available than on regulating their quality. Hence, it is not possible to draw any conclusion from this study about the effect of drawing poor children into care of good quality.

Gormley et al. (2005) examine the effects of Oklahoma's universal pre-K program which is run through the public schools and is thought to be of high quality. They take advantage of strict age cutoffs for the program and compare children who had just attended for a year to similar children who were ineligible to attend because they were slightly younger. They find a 52 percent gain in pre-reading skills, a 27 percent gain in pre-writing skills, and a 21 percent gain in pre-math skills. These results suggest that a high quality universal pre-K program might well have positive effects, though one would have to track children longer to determine whether these initial gains translate into longer term gains in schooling attainment.

Universal programs are often popular, but can be a very expensive way of benefiting low income children, since most of the children who are subsidized are likely to be of higher income. New Jersey has taken an innovative approach to the issue of providing high quality care for low income children as a result of a long-running law suit, Abbott vs. Burke. In 1998, the state Supreme Court ordered the state to establish preschool programs in 30 needy, mostly urban, school districts. In 2000, the state Department of Education mandated that the districts provide full-day preschool. The "Abbott program" now enrolls 43,000 students in high quality child care centers. In fact, the court took the unprecedented step of defining quality by mandating pupil-teacher ratios, staff qualifications, and access to special services, if needed. In terms of these measurable aspects of quality, the Abbott program centers now look better than many Head Start centers in New Jersey. But this judicial solution has not been without controversy--several school districts are filed a lawsuit against the state because the state did not fully finance the cost of running these centers (Schwanebert, 2004). Still, the Abbott program represents a promising model for state initiatives because it targets scarce child care dollars to the children who need them most, and provides high quality programming.

One reason for focusing on early intervention through the provision of quality child care is that the majority of young children are likely to be placed in some form of care. In 2000, 65.3% of single women with children under 6 were in the work force. The majority of infants are placed in some sort of non-maternal care by four months of age. Even mothers who do not work use child care. A third of their 0 to 4 year old children are in non-parental care for an average of more than 20 hours per week (c.f. Blau and Currie, 2004). Moreover, the government is already a major player in the market for child care covering a third of the costs of child care for children less than six. The government intervenes in the market for child care through tax credits, subsidies, regulation, and by directly providing care.

Given these other available mechanisms, an important question is why the government should be in the business of directly providing care through, for example, Head Start centers? The simple answer is that the other mechanisms (at least as currently formulated) do not do the job of providing quality child care to low income children. Tax credits such as the Dependent Care Tax Credit (DCTC) generally do not benefit low income families. State subsidy programs such as those funded by the federal Child Care and Development Fund (CCDF) typically place more emphasis on supporting maternal employment than on ensuring that the subsidized care is of good quality and many families eligible for these subsidies are not served.

Finally, regulation (which is done at the state level) generally sets bare minimum standards which are weakly enforced and does not even aspire to insure that the quality of care provided will be sufficient to provide benefits to children. It is interesting to compare the federal approach to child care subsidies to housing subsidies under the Section 8 voucher programs. Section 8 standards potentially provide incentives to landlords to upgrade their housing. The federal government also gives money to local housing authorities which is used to

pay for the inspections necessary to insure that subsidized housing meets these standards. If the federal government adopted similar policies with respect to child care, it would make child care subsidies contingent on the quality of care provided, and impose much higher standards than many states have adopted. Failing this, the direct provision of care through a proven program may be a better alternative.

Nurse home visiting programs are a second form of early intervention that has proven to be effective. David Olds (c.f. Olds et al., 1999) has conducted experimental evaluations of such programs in several settings (Elmira, New York; Memphis, Tennessee; and Denver, Colorado). Olds' programs focus on families that are at risk because the mother is young, poor, uneducated and/or unmarried, and involve nurse visits from the prenatal period up to two years post-partum. Evaluations have shown many positive effects on maternal behavior, and on child outcomes. As of two years of age, children in Elmira were much less likely to have been seen in a hospital emergency room for unintentional injuries or ingestion of poisonous substances, although this finding was not replicated at other study sites. As of age 15, children of visited mothers were less likely to have been arrested or to have run away from home, had fewer sexual partners, and smoked and drank less.

The children were also less likely to have been involved in verified incidents of child maltreatment. This finding is important given the high incidence of maltreatment among U.S. children (and especially among poor children), and the negative outcomes of maltreated children (Currie and Tekin, 2006).

There was little evidence of effects on cognition at four years of age (except among children of initially heavy smokers), though one might expect the documented reduction in

delinquent behavior among the teens to be associated with improvements in schooling attainment.

Olds results should not be interpreted to mean that all home visiting programs are likely to be effective. The evaluations suggest that using nurses as home visitors is key to the acceptability of the visitors (families want medical services, but may be suspicious of social workers or community workers). Also, Olds programs are strongly targeted at families considered to be at risk and so they do not shed light on the cost-effectiveness of universal home visiting programs.

Home visiting programs can be viewed as a type of parenting program—presumably the reason why Olds home visitors improved outcomes is because they taught mothers to be better parents. Since parents are so important to children, programs that seek to improve parenting practices are perennially popular. Yet studies of these programs suggest that it is remarkably difficult to change parent's behavior and that many attempted interventions are unsuccessful. The most successful parenting programs are those that combine parent education with some other intervention that parents want, such as visits by nurses (as in Olds case) or child care (Brooks-Gunn and Markham, 2005).

After School Care

Older children also often need non-parental care. In 1999, 10.5% of 5 to 14 year old children of employed mothers were unsupervised for part of the day. The fraction of children who are unsupervised rises sharply with age. Only 8.1 percent of 9 year olds are left unsupervised compared to 44.9 percent of 14 year olds. Children left to their own devices are at increased risk of truancy, poor grades, and risky behaviors of all sorts. Juvenile crime rates

triple between 3 and 6 in the afternoon when children are most likely to be left unattended. Children are also most likely to be victims of violent crimes committed by people outside their families in these after school hours. Clearly, lack of supervision is a serious problem, at least for some children (c.f. Blau and Currie, 2004; Aizer, 2004; U.S. Office of Juvenile Justice and Delinquency Prevention, 1996).

After school care has been widely endorsed as a way to improve child outcomes and reduce crime. Between 1997 and 2002, the U.S. Department of Education increased funding for 21st Century Community Learning Centers, which are school-based after school programs, from \$40 million to \$1 billion. In 2001, 1.2 million elementary and middle school students participated in this program in 3,600 schools. State governments have also increased their spending through, for example, California's Proposition 49.

Sepannen et al. (1993) point out that there is a large gap between the rhetoric of after school programs and what is actually provided. In a national survey, they found that 83 percent of enrollees in after-school programs were children in pre-kindergarten through grade three, so that the programs were not used much for the older children who are most at risk of being left on their own. Fewer than half of all programs offer creative writing, sports, field trips, or science activities at least once a week. Measures of quality are very uneven, with some programs employing high-school dropouts as child minders, and ratios of 25 children to one teacher.

Most evaluations of after school programs focus on model programs that offer tutoring. For example, the Howard Street Tutoring Program randomly assigned second and third grade students with poor reading scores to a treatment group which received tutoring, or a control group. The treatment group showed improvements in basal word recognition and spelling. The LA's Best program has also received a great deal of attention. This program offered

comprehensive after-school tutoring, cultural enrichment, recreation, computer, and nutrition services to Kindergarten and elementary school children in 19 of Los Angeles' poorest schools. Three studies have compared the LA's Best children to control children drawn from the same schools. There is some evidence that the LA's Best children did better in certain respects than the controls. But many of the analyses are flawed. For instance, Huang et al. (2000, 2001) report increases in the Stanford 9 test scores of LA's Best children, but do not compare them to Stanford 9 test scores of other children. This is a potentially important omission as test scores in the Los Angeles Unified School District have shown overall increases in recent years--between 1998-99 and 2000-01 the mean percentile on the Stanford 9 reading increased from 27 to 38 for Grade 2 students.

There have been few evaluations of programs aimed at keeping older children in school and out of trouble. The Quantum Opportunities program randomly assigned ninth grade students who were on public assistance either to a control group, or to a treatment group that got afterschool educational activities and community service activities each year for four years.

Treatment students received monetary rewards for completing each portion of the program.

Participants in this program were more likely to graduate from high school or to obtain a GED than controls, and they were more likely to go on to post-secondary education. They also had significantly fewer children and reported being more hopeful about the future than other teens. But there was no significant difference in the probability that participants had been "in trouble with police" in the past year (Hahn et al. 1994).

Big Brothers/Big Sisters has been shown to be effective in improving a range of outcomes. For example, it reduces the probability that a little brother or sister hits someone or starts taking drugs, and improves schooling attendance (J.P. Tiernay et al., 1995). The "I Have a

Dream" program which pays college tuition if children graduate from high school has had large impacts on high school graduation (Kahne and Bailey, 1999).

These model programs show that it is possible to make a difference in the lives of schoolaged children. But these intensive, expensive, privately-funded programs bear little resemblance to the after-school programs available to most children, and cannot even be regarded primarily as child care programs. At this point, there is simply no evidence that the publicly funded afterschool programs that have been adopted in most jurisdictions have any effect on child outcomes, or that they reduce crime (Bodilly and Becket, 2005).

A recent evaluation of the 21st Century Learning Program reinforces this conclusion (Dynarski et al., 2004). This evaluation included a large number of both elementary and middle school children. Twenty-six programs serving elementary students were assessed using random assignment. A national sample of programs for middle-school children was assessed by creating a matched sample of control children to compare to the program children. One of the more startling conclusions of the evaluation is that the program had no impact on the number of latch-key children or on children's academic achievement. The elementary school children did report feeling safer, though the middle-school children did not.

Most of these programs offered homework assistance and enriching activities, so given the rhetoric surrounding the importance of after school programs, it is surprising that they did not have more impact. One possible explanation is that on average, most students attended only two days a week. Another possibility is that some types of programs were more effective than others, and that these programs have not yet been identified. But the most reasonable conclusion is that the quality of typical after school programs will have to be upgraded significantly before they can be expected to have impacts similar to those of model programs. In particular, if the aim of

the program is to reduce crime, then it needs to be aimed at youths and it needs to insure that they participate regularly (perhaps through incentives). If it is aimed at improving scholastic achievement, then a successful program will offer intensive tutoring rather than "homework help".

3. Take Up

"Take up" refers to the rate at which people who are eligible for programs make use of them. Poor children in the U.S. would be much better off if there was full take up of the benefits that they and their families are already entitled to receive. For example, take up of the State Children's Health Insurance Program (SCHIP) has been low (8 to 14%), with the result that the number of uninsured children has changed relatively little since the introduction of the program. Take up of Medicaid coverage among children is low--Currie and Gruber (1996b) estimated that while the fraction of children eligible for Medicaid increased by 15.1 percentage points between 1984 and 1992, the fraction covered increased only 7.4 percentage points, while Card and Shore-Sheppard (2004) find that expansions of eligibility to all poor children born after September 30, 1983 led to about a 10 percentage point rise in Medicaid coverage for children born just after the cutoff date. On the other hand, 35 to 40 percent of all U.S. births are now paid for by the Medicaid program, suggesting extremely high take up of Medicaid by pregnant women.

There is considerable evidence that transactions costs are important determinants of take up rates. For example, Currie's (2000) finding that enrollments in Medicaid among immigrant children increase with family size strongly suggests that it is benefits relative to transactions costs (or stigma) that matter. Blank and Ruggles' (1996) study of participation in AFDC and the Food Stamps Program showed that participation increased with the size of the benefits people

were eligible for, suggesting an important role for transactions costs/stigma. Daponte, Sanders, and Taylor (1999) conducted an experiment, and found that informing people about their eligibility for the FSP increased the probability of participation. However, people eligible for larger benefits were more likely to take them up, once again suggesting a non-trivial role for transactions costs/stigma.

Currie and Grogger (2002) show that reducing re-certification intervals had a negative effect on participation in the Food Stamp Program, particularly among single heads and people in rural areas, both groups that could be expected to have relatively high transactions costs.

Brien and Swann (1999) show in cross-sectional data that requiring income documentation of WIC applicants reduced participation rates. Bitler, Currie, and Scholz (2003) find in a panel, that requiring more frequent visits to the WIC office also reduces participation, while Chatterji et al. (2002) find that restricting the types of foods that can be purchased (i.e. reducing the value of the benefit) discourages take up. Hence, transactions costs relative to benefits appear to be very important determinants of take up.

The climate in local welfare offices can have a large effect on take up by altering these transactions costs. For example, a September 2003 undercover investigation in New York City found that 11 percent of the sites listed by the city's Human Resource Administration as food stamp offices did not exist; that investigators were not able to obtain an application for the FSP from the existing sites a quarter of the time; that 27 percent of these sites did not have any written information about the program available on site; and that 52 percent of the time applicants were illegally asked personal information while attempting to get an application. Since the FSP is a federal program, it is not in the interest of city or state welfare agencies to make it difficult for people to enroll, which is why New York City conducted this investigation.

The hostility and misinformation found by the New York investigators are just one example of the barriers to accessing safety net programs faced by the poor. (Sender et al., 2003)..

What can be done to increase take up among eligibles? Evidentally barriers such as those discussed above should be removed. Giving business as well as individuals a stake in promoting take up can be effective. In the case of the EITC, many preparers advertise instant cash back, which is essentially the person's EITC credit less the preparer's fee. Kopczuk and Cristian Pop-Eleches (2004) show that the introduction of state electronic filing programs significantly increased participation in the EITC, by giving commercial tax preparers an incentive to serve the low income market.

In the case of Medicaid, hospitals have a stake in getting pregnant women who are eligible signed up, because they are required to serve women in active labor whether or not the women can pay (as long as the hospital accepts any payments from Medicare). There is evidence that pregnant women were responsible for much of the uncompensated care provided by hospitals prior to the Medicaid expansions (Saywell, 1989). Many hospitals have subsequently established Medicaid enrollment offices on site. These offices assist people in completing applications and tell them how to obtain necessary documentation.

Conversely, Medicaid enrollment rates may have remained low for other groups despite increases in income cutoffs because of lack of support for the program among vendors of medical services. Baker and Royalty (1996) use data from a longitudinal survey of California physicians observed in 1987 and 1991 and find that expansions of Medicaid eligibility to previously uninsured women and children increased the utilization of care provided by public clinics and hospitals but had little effect on visits to office based physicians.

California recently conducted an experiment in which community organizations were paid \$50 per successfully completed Medicaid application. Aizer (2003) finds that this program had a large impact on Medicaid enrollments, particularly in the Hispanic and Asian communities, and that the increase in Medicaid coverage resulted in fewer preventable hospitalizations among eligible children. In contrast, statewide advertising of Medicaid and the Healthy Families program seemed to have effects only on the enrollment of infants. It appears that people with older children already knew about these services, but needed more specific assistance enrolling.

Yelowitz (2000) provides evidence that altering enrollment requirements for one program can have spillover effects onto the enrollments in other programs. He estimates that for every 10 newly eligible families who took up Medicaid benefits, four also took up the Food Stamp Program. It is possible that families learned about their eligibility for the FSP when they went to the welfare office to apply for Medicaid. Alternatively, it may be more worthwhile to bear the application costs in the case of Medicaid and the FSP together than in the case of FSP alone. Thus, making it easier to apply for multiple programs might also increase take up among eligibles.

In summary we could increase the take up of effective anti-poverty programs by reducing barriers to participation and by giving institutions incentives to assist individuals in taking up their benefits. As the entities charges with overseeing many anti-poverty programs, cities have a large role to play in this effort.

4. Conclusions

Many of the programs developed to help poor children have had a huge positive impact on inner-city children. The challenge going forward is to improve the services available, and to prevent gains from being lost. For example, the increasing cost of providing Medicaid services

to the elderly and disabled threatens to undermine the viability of the program. Ironically, it is often mothers and children who are cut from the rolls because of funding problems, although they tend to cost relatively little. Nutrition programs have been successful in all but eliminating diseases related to nutrient deficiencies. Now these programs must be refined so that they do not encourage diseases linked to the over-consumption of empty calories.

Public housing continues to have many problems, though an overhaul has been underway now for many years with the demolition of some large projects, the rehabbing of others, and a move towards voucher based programs. At the same time, the increasing funds being funneled to construction-based programs may not be the best use of scarce public housing funds. Surprisingly, there is little evidence that poor children benefit from living in a mixed-income development per se, and many of these developments displace considerable numbers of traditional public housing residents.

Early intervention programs show a lot of promise and are the most effective proven way to improve the outcomes of poor children. But we should beware of calls to dismantle programs like Head Start in order to, for example, give block grants to states for child care. While some states have developed excellent public preschool programs, most have not, and most offer little oversight of private child care. Successful federal policy in this area would involve continuing to improve Head Start and attaching strict quality standards to transfers to states for child care. The government should also consider the feasibility of a home visiting program along the lines that Olds has tested.

The continuing enthusiasm for afterschool programs and parenting programs needs to be tempered by a hard look at the data. While some afterschool programs are effective, these tend to be highly specialized model programs with clear goals for the children. There is little

evidence that the average program has any positive effect. And while it stands to reason that changing parents' behavior could be one of the most effective ways to benefit children, it appears to be remarkably difficult to accomplish this. Parenting programs that take place in conjunction with quality preschools have the best track record.

Finally, whatever programs are adopted, we need to pay more attention to their design and implementation, so that they actually serve those who are intended to benefit. Cities must be on the front lines of this effort, advocating for funding for programs that work, and insuring that eligible children receive the benefits.

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Table 1: Expenditures and Caseloads for Safety Net Programs, 1980 and 2002

	1980		2002		
	Expenditure	Expenditure	Caseload	Expenditure	Caseload
Cash	(1980 billions)	(2002 billions)	(millions)	(billions)	(millions)
TANF payments	12.0	26.2	10.6	11.1	5.1
Other TANF services	NA	NA		13.4	
Earned Income Tax Credit	2.0	4.4	7.0	35.8	19.8
Old Age and Disability Benefits	120.5	263.1	30.9	453.8	46.5
OASDI for Children	10.3	22.5	3.3	20.4	3.9
Health Care					
Total Medicare	35.0	76.4	28.5	256.8	40.0
Total Medicaid	23.3	50.9	21.6	213.5	49.8
Medicaid (dependent children&their adults	6.4	14.0	14.2	54.7	37.8
SCHIP				3.0	5.4
Nutrition					
Total Food Stamps	9.2	20.1	21.1	21.7	20.2
Food Stamps - families with children	5.5	12.1	12.7	11.7	10.9
School Lunch & Breakfast	3.3	7.2	14.9	8.4	22.7
WIC	0.7	1.5	1.9	4.4	7.5
Housing					
Low-Rent Public Housing	2.2	4.8	NA	8.9	NA
Section 8 & other assisted rental housing	3.1	6.8	NA	20.0	NA
Homeless programs				1.4	NA
Housing Block Grants				1.8	NA
USDA Rural programs	NA	NA		9.3	NA
Assume 1/2 spending is for children	2.7	5.8		20.7	
Child Care					
Child Care and Development Block Grant	NA	NA	NA	7.9	1.8
Head Start	0.7	1.5	0.4	6.5	0.9
Total spent on children (bolded entries only)	43.6	93.7		198.0	
Cash welfare as percent of total	52.0	52.0		15.9	

2002

Sources:

Green Book

2004 - Tables 1-9, 1-11, 2-1, 2-2, 3-1, 3-11, 4-1, 7-6, 9-16, 9-26,13-14, 15-11, 15-21, 15-22, 15-24, 15-25, 15-26, 15-27, 15-28, 15-31, 15-33, K-10 and Chart 7-3.

1996 - Table 16-34.

1986 - Tables 7-1, 8-15.

Statistical Abstract of the U.S.

2006 - Tables 232, 243, 265, 277.

1998 - Tables 310.

Annual Statistical Supplement

2005 - Table 8.E2.

Further Notes:

OASDI for Children figures are for 1985.

Medicare enrollment figures are for 2001.

Number of Food Stamp recipients under families with children is estimate based on Table 15-10 that 60% of 1980 recipients had children and 54% of 2002 recipients had children.

Figures for school nutrition programs include only free and reduced-price meals.

The school lunch and breakfast figures may double count the number of children (also note that the Green Book's lunch table is wrong, replicating breakfast table.

Caseload for CCDBG includes individuals affected by state-only programs.

Public post-secondary figures are for 2001.

EITC caseloads, and housing caseloads are number of families, all others are number of individuals.