Child Advocacy Program
Art of Social Change:
Child Welfare, Education, & Juvenile Justice

Professor Elizabeth Bartholet
Lecturer on Law Jessica Budnitz

ASSIGNMENT PACKET for Session #5
October 13, 2011

Early Intervention

Deborah Daro, Senior Research Fellow, Chapin Hall at the University of Chicago

Response Panel:

Amy O'Leary, Director of the Early Education for All (EEA) Campaign, Strategies for Children and Member of the Governing Board, National Association for the Education of Young Children

Sarita Rogers, Assistant Director of Programs at the Children's Trust Fund and Director of Newborn Home Visiting

Session #5
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Assignment

Speaker Biographies

Session Description

Readings: **Pages ***

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Deborah Daro:

- R. Haskins, et.al., *Social Science Rising: A Tale of Evidence Shaping Public Policy*, The Future of Children, 2009 1-6
- D. Daro and K. Dodge, *Strengthening Home-Visiting Intervention Policy: Expanding Reach, Building Knowledge*, Investing in Young Children: New Directions in Federal Preschool and Early Childhood Policy (Brookings and NIEER, 2010) 7-14
- D. Olds, *The Nurse-Family Partnership*, Investing in Young Children: New Directions in Federal Preschool and Early Childhood Policy (Brookings and NIEER, 2010) 15-21

* NC refers to Nobody's Children pages. All other page numbers refer to this Assignment Packet.

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Speaker Biographies

Deborah Daro (Ph.D.,Social Welfare, University of California, Berkeley) is Senior Research Fellow at Chapin Hall at the University of Chicago. Prior to joining Chapin Hall in January 1999, Dr. Daro served as director of the National Center on Child Abuse Prevention Research, a program of the National Committee to Prevent Child Abuse, where she contributed to the development of Healthy Families America (HFA), a strategy for developing a universal system of support for all newborns and their parents. Dr. Daro currently serves as co-project director for the national cross-site evaluation of the Supporting Evidence-based Home Visitation Programs to Prevent Child Maltreatment. In this capacity, she has played a lead role in crafting a system for monitoring initial and ongoing program fidelity that assesses implementation progress in a consistent way across all of the national home visitation models being implemented in this initiative. For the past several years, Dr. Daro has assisted a number of state and local entities in developing more integrated systems of early intervention that build on a system of universal as well as targeted home-based interventions. Current and past clients include First 5 Commission in Los Angeles County, Children's Services Council of Palm Beach County, Florida, the Nebraska Children and Families Foundation, and Thrive by Five Seattle. Dr. Daro has published and lectured widely; her research is frequently cited in the rationale for child abuse prevention and treatment reforms and investments in home based interventions. In 2004, she received the Anne Cohn Donnelly Child Abuse Prevention Leadership Award. She has served as president of the American Professional Society on the Abuse of Children and as Treasurer and executive council member of the International Society for the Prevention of Child Abuse and Neglect.

Responders:

As Director of the Early Education for All (EEA) Campaign, **Amy O'Leary** is responsible for managing all advocacy, constituency and awareness building, and policy development to ensure a statewide system of high-quality early education and care for all children from birth to age 14.The goals of the Campaign include: voluntary, universally accessible, high-quality pre-kindergarten, for every child delivered through a mix of public and private programs; voluntary, universally accessible, high-quality full school-day public kindergarten for every child; and a statewide system to improve the training, education and compensation of the early childhood workforce and building a statewide system of high-quality early education and care for all children beginning at birth. Amy joined the EEA team in 2002 as the Early Childhood Field Director and served most recently as the Deputy Director. Prior to joining EEA, Amy worked as a

preschool teacher and Program Director at Ellis Memorial and Eldredge House, Inc. in Boston, Massachusetts. In 2011, Amy was elected to the governing board of the National Association for the Education of Young Children. She is a member of the Children's Defense Fund Emerging Leader Fellowship and adjunct faculty at Wheelock College in Boston. Amy holds a Bachelor's degree in Psychology and Early Education from Skidmore College and a Master in Public Administration degree from Sawyer School of Management at Suffolk University.

Sarita Rogers is the Director of Home Visiting and Associate Director of Programs, MA Children's Trust Fund. Since 1997, she has coordinated the accredited HEALTHY FAMILIES MA home visiting program system and the HFM Implementation Team (HFMIT) that provides program and policy development, contract management, technical assistance and quality assurance to ensure model fidelity and best practices on the program model, as well as training in relevant skills and topics for program staff statewide. In addition, she has oversight of the evaluation project for HEALTHY FAMILIES MA, a randomized trial conducted by Tufts University that will be completed in 2014. She is part of a national network of leaders in the field of home visiting, where HEALTHY FAMILIES MA is looked at as a best practice model in several facets of program implementation.

While she spent several years working with and developing family support models with military families, she is most influenced by her past work as a home visitor in Hawai'i Healthy Start, working with families to prevent child abuse and neglect. Her commitment to families across the lifespan has also inspired her to participate on the Board of Overseers for Rogerson Communities and on the Advisory Board of the Ganley Foundation. She is the recipient of the Prevent Child Abuse America Visionary Leader Award (2002) and holds the degrees of Bachelor of Arts in History from Kansas State University and Master in Public Policy from the John F. Kennedy School of Government, Harvard University. In addition, she has a certificate in Nonprofit Management from the Boston University Institute for Nonprofit Management and Leadership.

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Session Description

Child welfare experts assert that early intervention efforts are essential to achieving good outcomes for children at risk of abuse and neglect. Senior Research Fellow Deborah Daro will describe her early intervention model, starting at birth with universal assessments and then targeted services as needed. She will describe her view on effective universal home visiting systems. Furthermore, she will discuss issues presented by the current policy focus on investing only in evidence-based programs.

Local experts Amy O'Leary and Sarita Rogers will remark on the existing early intervention efforts in Massachusetts, and discuss if and how Daro's ideas might be implemented here.

The Future of Children
PRINCETON-BROOKINGS

POLICY BRIEF FALL 2009

Social Science Rising: A Tale of Evidence Shaping Public Policy

Ron Haskins, Christina Paxson, and Jeanne Brooks-Gunn

Rigorous social science evaluations of home-visiting programs designed to improve parenting and reduce child maltreatment convinced President Barack Obama's administration to initiate a multi-billion-dollar federal program to expand a particular model of home visiting. Supporters of other models reacted by lobbying Congress and the administration to fund other program models as well. In the resulting compromise, programs with the strongest evidence of success would receive the most money, and those with modest evidence of success would get some but less money. All programs that are funded would be subject to continuous evaluation using rigorous methods to ensure continuing good results. At least in this case, policy makers are focused on social science evidence and are using it to identify and support the most successful programs.

A major goal of social science is to influence public policy by generating practical knowledge that can help policy makers make informed decisions. This is especially true of social scientists who study children. Over the past four decades, they have developed increasingly reliable methods to test whether programs affect children's behavior and development and if so, whether their effects are long-lasting. Stripped to its basics, the model that developmental scientists follow is to identify an important social problem, design a treatment for the problem (or for preventing the problem), and test whether the treatment produces the desired outcome. In some cases, the findings can be used to calculate the benefits and costs of large-scale implementation, thereby providing policy makers with arguably the most direct and pertinent information they need to make sound decisions about public spending.

Just such a scenario is now playing out in the nation's capital. In his budget blueprint released in February 2009, President Barack Obama recommended spending up to $8 billion over the next ten years on a

About the authors: Ron Haskins is a senior editor of *The Future of Children*, senior fellow and co-director of the Center on Children and Families at the Brookings Institution, and a senior consultant at the Annie E. Casey Foundation. Christina Paxson is a senior editor of *The Future of Children*, dean of the Woodrow Wilson School of Public and International Affairs, and the Hughes-Rogers Professor of Economics and Public Affairs at Princeton University. Jeanne Brooks-Gunn is the Virginia and Leonard Marx Professor of Child Development and Education at Teachers College and the College of Physicians and Surgeons at Columbia University.

For the full report on Preventing Child Maltreatment, edited by Christina Paxson and Ron Haskins, go to www.futureofchildren.org.

nurse home-visiting program aimed at helping poor mothers learn parenting behaviors that would boost their children's development. Tracing the early history of this proposal as Congress prepares for legislative action illustrates both the trials and triumphs of social scientists' efforts to produce evidence to shape public policy.

What, Exactly, Are Home-Visiting Programs?

First, some background. Home-visiting programs come in all shapes and sizes. There are a host of program models, many with written curriculums, trained staff, and elaborate financing arrangements. Some programs already serve thousands of children. Individual programs vary dramatically with respect to children's age, risk status of families served, range of services offered, and intensity of the intervention as measured by the frequency and duration of the home visiting. They also vary by who makes the visits, usually either a trained paraprofessional or a professional nurse, teacher, or social worker. Nor do all programs have the same goals. Some aim specifically to reduce child maltreatment, whereas others focus on improving children's health and developmental outcomes. What they all share is the view that services delivered in a family's home will have a positive impact on parenting, which in turn can influence the long-term development of the child.

Although home-visiting programs have been around for more than a hundred years, many newer programs developed since the 1960s use sophisticated evaluation methods to test their effectiveness. The best programs with the strongest reputations have been evaluated using randomized clinical trials (RCTs), which have recently been recognized by the National Academies as providing "the highest level of confidence" in program efficacy or failure. RCTs randomly assign families eligible for a program either to an experimental group, which receives the treatment, or to a control group, which does not; evaluators collect information about parents and children in both groups over many years during and after the treatment. Random assignment ensures that both groups are initially equivalent, thereby assuring that any differences in parenting or child outcomes between the groups over time are attributable to the treatment. There is widespread—but not universal—agreement in the scholarly world that RCTs are the gold standard of program evaluation. If programs have not been evaluated by random assignment, according to the National Academies, "evidence for efficacy or effectiveness cannot be considered definitive, even if based on the next strongest designs."

Applying Evidence to Public Policy

Not surprisingly, the process of applying evidence, even gold standard evidence, to choice in the policy world does not always go smoothly. The first bump in the road is politics. The views of congressional committee chairmen, national political party leaders, and the president almost always outweigh evidence. And powerful interest groups that can shape legislation and determine its fate are often motivated primarily by their desire to help the people and organizations they represent, regardless of what the evidence shows.

A second problem is that the research evidence based on carefully executed RCTs is seldom as clear and straightforward as one would like. The results of RCTs hinge critically on the design and implementation of the specific programs being evaluated and on the characteristics of the groups participating in the evaluation. Differences in program implementation, especially the skill and training of those delivering the program and the demographic characteristics of program participants, can have major impacts on outcomes. For these reasons, evaluations of similar programs—or even of the same programs administered in different settings—can yield discrepant results, leading to no end of dispute about whether the program "works." The result can be a battle of conflicting evidence that is baffling and sometimes annoying to policy makers.

The current home-visiting policy scramble illustrates both of these difficulties. Many researchers and reviewers have singled out one particular program, the Nurse-Family Partnership program developed by David Olds, as being especially effective and well-documented. First tested by RCT in rural New York

on a predominantly poor sample of white teen mothers beginning in 1977, the program was later evaluated using RCTs in Memphis and Denver. In both replications, some characteristics of the original program, as well as the types of participating families, were varied. The results of evaluations of the three trials, all of which produced significant effects on key parent or child outcomes such as child health and safety, parenting quality, and child cognition, have been reported in peer-reviewed journals, a *sine qua non* for a program to claim it is supported by scientific evidence. In 1996, Olds began expanding the program by working with state officials and others while trying to ensure fidelity to his program model. By 2008, Nurse-Family Partnership programs had spread to twenty-five states. Seldom has an intervention program been so carefully tested and expanded with such serious attention to getting new sites to maintain fidelity to the program model.

Differences in program implementation, especially the skill and training of those delivering the program and the demographic characteristics of program participants, can have major impacts on outcomes.

The success of the Olds program did not go unnoticed by senior officials in the Obama campaign and subsequently in the Obama administration. In addition to a host of other domestic initiatives, President Obama's 2010 budget blueprint included funds for a "Nurse Home Visitation" program. The text accompanying the blueprint leaves little doubt about what the administration had in mind. First, the initiative uses the word "nurse," which is not part of the name of any prominent home-visiting program except the Olds Nurse-Family Partnership. Second, in describing the program, the budget text explains that funds would be given to states to "provide home visits by trained nurses to first-time low-income mothers and mothers-to-be." Again, a perfect fit with the Olds program. The text then continues: "The program has been rigorously evaluated over time and proven to have long-term effects" and produces a "return-on-investment [of] between 3 to 6 dollars per dollar invested." With these words, the administration served notice that it supported only programs with strong evidence of success. Indeed, the most reasonable interpretation of the wording is that the administration intends to fund the Olds program.

Obama's apparent intention to fund only the Olds home-visiting program startled the worlds of early childhood education in general and home visiting in particular, because it meant that other nationally prominent programs such as Parents as Teachers, Healthy Families America, the Parent-Child Home Program, and HIPPYUSA would be left out. The concerns of these groups were not without merit. Some of these other programs had, like the Nurse-Family Partnership, been subject to rigorous evaluation with RCTs. Furthermore, within the scholarly world, some believed that the Olds program required further evaluation: there were inconsistencies in the results from the three evaluations; the programs had not been subject to evaluation by researchers outside of Olds' team; and the program focused on a narrow group of mothers—notably low-income first-time mothers who agreed, while pregnant, to participate in a two-year program.

The Lobbying Begins

With the emphasis on "nurse home visiting" in Obama's budget blueprint, the debate left the pristine confines of academic journals and conferences and leaped into the rough and tumble forum of federal policy making. In this venue, the home-visiting programs that felt slighted by the president's budget blueprint initiated a lobbying campaign to broaden the president's language to include additional home-visiting programs. Many of the programs not singled out by the president were part of a long-established coalition of influential and effective Washington child advocacy groups that included the Center for Law and Social Policy, the Children's Defense Fund, the Child Welfare League of America, and others. The

general line taken by these programs and their advocates was that Obama's emphasis on home visiting was an important advance for children and families, but that his proposal to single out one program for support was ill-advised. All high-quality, evidence-based programs, they argued, should be eligible for funding. Not surprisingly, groups favoring the Olds program started lobbying, too. All this is standard fare for federal policy making; the only difference is that those favoring the Olds program and those favoring broader inclusion would normally be allies on federal legislation to support children and families.

Two entries in the debate are especially worthy of note. The Coalition for Evidence-Based Policy, an influential Washington lobby for high-quality program evaluation, declared its support for the president's decision to fund research-proven home-visitation programs such as the Nurse-Family Partnership. Run by Washington veteran Jon Baron, the coalition has assembled an advisory board that includes several noted scholars and others with an interest in applying high-quality evidence to policy choice, including a Nobel laureate (full disclosure: one of the authors of this brief is a member of the coalition's advisory board, though unhappily not the Nobel laureate). In April, the coalition issued a well-reasoned brief that emphasized its nonpartisan nature as an organization focused on promoting the development of rigorous evidence. Indeed, Baron and his coalition have almost single-handedly succeeded in getting many pieces of federal legislation to designate funds for program evaluation, especially RCTs. Citing an "authoritative" evidence review from *The Lancet*, a respected medical journal, that found the Olds program to have the "best evidence for preventing child abuse and neglect," the coalition expressed unqualified support for funding of programs, such as the Nurse-Family Partnership, that meet the highest standards of evidence. A six-page attachment to the brief reviewed evidence from the three RCTs by which the Nurse-Family Partnership had shown its strong impacts while pointing to deficiencies in the RCTs by which five other home-visiting programs had been evaluated.

Perhaps spurred by the coalition brickbat against the non-Olds programs, four highly respected scholars, including Deborah Daro of the University of Chicago, Ken Dodge of Duke, Heather Weiss of Harvard, and Ed Zigler, the child development sage from Yale, issued a call for broadening the funding. Their soundly argued letter to the president praised his proposal for investing in home-visitation programs, but criticized the focus on one program model. The impressive quartet argued that a single program model targeted on first-time mothers would leave out too many at-risk parents. They also cautioned against a sole reliance on evidence generated from RCTs, which do not provide guidance on how to scale up a model program to serve national needs. Finally, they expressed the view that although at-risk families merit the most intensive services, all families should have access to early child development programs. The world of social science, it appears, does not speak with one voice, and even the best evidence can lead to multiple—and sometimes directly opposing—conclusions.

Possibilities for Compromise

By the time Congress approved its budget resolution in late April, the forces supporting the broader language appeared to be making headway, because the budget supported home-visiting programs that "will produce sizable, sustained improvements in the health, well-being, or school readiness of children or their parents" and contained no mention of nurse visiting. Similarly, the Obama language on nurses was gone from the final administration budget released in early May.

The next and critical step was for congressional committees to begin writing the new program into law. Chairman Jim McDermott (D-WA) of the Human Resources Subcommittee of the House Ways and Means Committee was the first out of the box. In early June he circulated draft legislation and then held a hearing on his bill on June 9. Like the budget resolution, the McDermott draft bill represents a compromise between the contending forces. Specifically, it would give priority funding to programs that "adhere to clear evidence-based models of home visitation

that have demonstrated significant positive effects on important program-determined child and parenting outcomes, such as reducing abuse and neglect and improving child health and development." Preferred programs must also have "well-trained and competent staff" and include training, technical assistance, and evaluation.

The world of social science does not speak with one voice, and even the best evidence can lead to multiple—and sometimes directly opposing—conclusions.

Many home-visiting programs—some of which are reviewed in an article in the latest issue of *The Future of Children* by Kimberly Howard and Jeanne Brooks-Gunn of Columbia University——would seem to qualify under the McDermott language because they follow a model that has at least some evidence of success from RCTs, feature trained staff, and have other characteristics consistent with McDermott's language. A subsequent section of the McDermott draft, however, stipulates that programs "that do not adhere to a model of home visitation with the strongest evidence of effectiveness" would be eligible for less generous funding. McDermott makes the word "strongest" do a lot of work. Apparently the compromise intended is to give preferred funding to the Nurse-Family Partnership because it is the program with "strongest evidence of effectiveness," but still to provide some funding for the other programs fighting to be included. Whether the McDermott language achieves the distinction between these two types of programs is arguable. Should the legislation be enacted as drafted, the regulations written by the Department of Health and Human Services (HHS) could settle the issue, in which case lobbying efforts will shift from Congress to HHS. Any party not satisfied with the regulations could take HHS to court. In the end, the courts could decide the issue—at least until Congress redrafts the provision to clarify its original intent, at which point the entire process would begin again.

Perhaps the most important sign of the central role being played by evidence in this debate is the June 8 blog posting of Peter Orszag, the director of the federal Office of Management and Budget and President Obama's closest adviser on budget policy. Orszag asserts that he and the president are placing evidence of program success from "rigorous" evaluations at the center of decision making. He states emphatically that the Obama administration will evaluate as many programs as possible, cut off funding for those that are not working, and expand those that are. In the case of home-visiting programs, he endorses the two-tier approach of giving more money to the programs with the strongest evidence of success and some but less money to programs that have "some supportive evidence but not as much." Orszag also cites several examples of how the administration is expanding funds for conducting rigorous program evaluations and then using the evidence to make funding decisions.

A Step Forward for Social Science

Legislation is messy. But as this episode unfolds, there is a lot to like for the social science community. Our own view is that the available research, combined with language like that drafted by McDermott, does not permit a sharp distinction between programs with the "strongest evidence" and other programs. As the Howard and Brooks-Gunn article makes clear, a number of programs show evidence of benefits, and no single program clearly dominates the rest. But it must be counted as a victory for social science that the federal policy process now hinges importantly on evidence, a clear sign that both the administration and Congress want to do everything they can to fund successful programs. It also augurs well for the research community that the McDermott bill requires continuing evaluation of programs that receive the bill's funding. Indeed, the bill sets aside $10 million in guaranteed funding, mostly for program evaluation. The emphasis on continued evaluation is especially important in light of the ongoing

debates over which programs are most effective and concerns about whether the effects of programs will diminish as they are scaled up.

In the scuffle over which programs to fund, we hope that two important issues receive careful scrutiny. The first is whether home-visiting programs should be made available only to high-risk families or should instead be extended to low-risk families that are in little danger of maltreating their children or providing them with inadequate care or stimulation. In an ideal world, it may be worthwhile to fund home-visiting programs that make good parents even better. It may also be easier to build political support for universal programs than for narrowly targeted ones. Given the budget problems facing the U.S. government, however, we believe it makes most sense to target home-visiting programs on the high-risk parents who need them most and for whom the payoffs are likely to be the highest.

The second issue is whether, even for high-risk families, there can be a "one-size-fits-all" home-visiting program. Programs that work for first-time teen mothers may not be suitable for other groups of high-risk parents—for example, those with drug addictions or serious mental health issues. Funding and then evaluating programs that target different groups of high-risk families will make it possible to build up new evidence on which programs are effective, and for whom. The flexibility written into the current legislative draft will facilitate these efforts.

Like other participants in the policy process, researchers and their allies sometimes publicly disagree with each other, even when funding for programs they all support is on the line. But over the years, the relentless call by researchers, journals like *The Future of Children*, and respected organizations like the National Academies and the Coalition for Evidence-Based Policy have convinced policy makers that evidence of program success should be a requirement for program funding. Regardless of the outcome, in the current debate over home visiting, social scientists have taken another step toward the goal of getting policy makers to consider high-quality evidence when making program funding decisions. That is a signal achievement for the research community—and, in the long run, for the improvement of public programs for children and families.

STRENGTHENING HOME-VISITING INTERVENTION POLICY: EXPANDING REACH, BUILDING KNOWLEDGE

Deborah Daro and Kenneth A. Dodge

Many argue that the expansion of home visitation should be built solely around programs that have been proven through carefully structured clinical trials that engage a well-specified target population. We believe this approach is valuable but insufficient to achieve the type of population-level change that such reforms generally promise. We propose a home-visitation policy framework that embeds high-quality targeted interventions within a universal system of support that begins with an assessment of all new parents. This assessment process would carry the triadic mission of assessing parental capacity, linking families with services commensurate with their needs, and learning to do better.

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A common vehicle for reaching families as early as possible is offering pregnant women home-visitation services. No other service model has garnered comparable levels of political support nor generated more controversy.[1] Today, home visitation is viewed by some as a critical linchpin for a much-needed coordinated early intervention system and by others as yet another example of a prevention strategy promising way more than it can deliver.[2]

Several national models (for example, Parents as Teachers, Healthy Families America, Early Head Start, Head Start, Parent Child Home Program, SafeCare, HIPPY, and the Nurse-Family Partnership) are now widely available across the country.[3] These programs compete for access to the same population based on age and socio-demographics. In other ways, however, they are complementary and components of a potential comprehensive array of services across early childhood. In addition, more than forty states have invested in home visitation and the infrastructure necessary to ensure that these services are of high quality and are integrated into broader systems of early intervention and support.[4]

Effective public policy requires a solid idea which links actions to desired impacts, an implementation plan that extends support to the full population in need, and a research agenda that supports the learning necessary to guide innovation and efficient investment. The field of home visiting still has a long way to go to meet these conditions. One strategy is to build the policy using the traditional scientific framework, beginning with carefully crafted clinical trials of clearly defined service models which focus on a well-specified target population. Once proven, these models are then broadly adopted with the expectation that impacts will expand accordingly. This approach was reflected in President Obama's initial FY 2010 budget in which he advocated for the broad expansion of early home visitation by nurses. Although the proposal did not explicitly limit support to a single model, the program elements and evidence base proposed in that request mirrored the core characteristics and research agenda of the Nurse-Family Partnership (NFP).[5]

In response to this proposal, we and others argued that such an approach would not achieve maximum impacts and benefits for the next generation of young children for four principal reasons:

—Building a national initiative solely on the basis of a single model's limited target population (that is, low-income primiparous women who voluntarily commit to home visits for twenty-seven months) will leave most high-risk infants unserved and will limit the likelihood of community-level change in available services and supports for parenting.

—Building a national initiative solely on the basis of evidence generated by small randomized clinical trials with volunteer subject groups at limited sites provides little guidance on how to bring the model to sufficient scale to serve the national interest.

—Building a national initiative based solely on past evaluations of impact on a select group of women who consented to a research study fails to hold the initiative accountable for impact on the current population, particularly on previously untested subgroups.

—Building a national initiative that fails to understand that all parents face challenges in raising their children undermines collective responsibility and will

not ignite the political support necessary to create a robust early intervention culture that can sustain public investment in this area and foster behavioral change.[6]

As the policy agenda for home visitation moves forward and the impacts of this strategy are evaluated in terms of secular change in a broad set of population-level indicators such as child maltreatment and child development, we fear that population-level indicators will not change and the movement may become at risk. Therefore, we believe a distinctively different practice and research framework is needed. Specifically, our home-visitation policy framework would embed high-quality targeted interventions within a universal system of support that begins with an assessment of all newborns and their families. This assessment process would carry the triadic mission of assessing parental capacity to provide for a child's safety and healthy development, linking families with services commensurate with their needs, and building new evidence-based services to address identified unmet needs. Further, the research base promoted and valued under this system would not simply be one that presumes impacts that had been achieved in past trials but also places equal value on learning what is needed to do better.

Limits of the Targeted Approach

Many argue that the most efficient and prudent policy path, particularly in tough economic times, is to focus on expanding services to the most vulnerable populations. The logic underlying this approach is that because these groups are in greatest need, the opportunity for achieving measureable reduction in costly child and family outcomes is greatest through targeted interventions. The strategy also represents a more just policy in that public dollars are being directed to those least able to secure resources on their own. Investments in replicating Head Start and more recently Early Head Start (EHS) to increase access to high-quality early learning opportunities for the disadvantaged reflect this policy approach.

Targeted interventions, by definition, leave many families not eligible for service.

Although the exclusive replication of any intensive and well-researched home-visiting intervention that targets only one segment of the at-risk population may well achieve substantial change for many of its program participants, we believe that this approach, as public policy, will not generate impacts of the magnitude that are necessary to achieve and sustain substantial population-level change. The limit of this approach goes well beyond the financing that would be necessary to bring a program to full scale. The problem is that, even at full scale, there would be little impact on the population rate of maltreatment.

Targeted interventions, by definition, leave many families not eligible for service. In the case of NFP, services are limited to first-time low-income mothers who can be identified before the end of the second trimester of pregnancy and who voluntarily consent to participate in home visiting for twenty-seven months.[7] Based on the 2006 birth data available from the Centers for Disease Control, a unique focus on first-time parents would leave about 62 percent of newborns ineligible for service (about 2.7 million births annually). Further, infants in the foster care system, certainly a population at high risk for multiple negative outcomes,

are eight times more likely than other infants to have mothers who received no prenatal care—a reality that would have precluded these women from accessing NFP or other models offered only during pregnancy.[8]

Achieving efficiency is best done through a comprehensive assessment that identifies the specific needs of participants and refers them to the most appropriate service.

Demonstrating through a clinical trial that a program model is efficacious with its targeted volunteer population is no guarantee that if widely disseminated the program would achieve these same impacts with the larger population. Even within the context of a clearly specified target population and transparent eligibility criteria, full penetration is difficult to achieve. Populations demonstrating the greatest risk for maltreatment such as substance-abusing mothers and those involved in child welfare services are known to have relatively low rates of enrollment in voluntary programs.[9] These parents often find it difficult to focus on their children's needs and therefore are often less motivated to seek out and use supportive services.[10]

Once enrolled, families often do not remain enrolled long enough to achieve maximum impacts. Wide variation in retention rates exist across voluntary home-visitation programs, and many model home-visitation programs struggle to deliver supportive services to their target populations.[11] One study of a multi-year home-visitation program found the average study participant remained enrolled in services for a little over a year. Of the families in the study sample who had the opportunity to enroll for at least two years, only one-third achieved this service threshold.[12] Even a highly effective program is unlikely to alter population-level rates on core outcomes when it leaves many in need of assistance ineligible for enrollment or unwilling to enroll, and fails to retain the majority of those they do engage.

Although targeted services offer assistance to populations known to be at higher risk for specific negative outcomes, the strategy provides no support for segments of the population who rise in risk after the enrollment period due to life circumstances or are at risk based on criteria other than income. For example, maltreatment and poor parenting skills are not limited to low-income families or single-parent families and can surface in families across the income spectrum.[13] Risk varies across subgroups and may be more or less elevated as family circumstances change or a child's developmental needs vary. Many high-risk groups can be identified outside of the bounds of eligibility for prenatal home visiting with primiparous low-income mothers. Later-born infants in these same families, infants born at low birth weight, infants born to mothers who had experienced maltreatment as children, infants born to mothers who initiate prenatal care in the last trimester or not at all, and infants whose mothers display parenting deficits are all at elevated risk. Similarly, no risk assessment tool has perfect predictability and most fail to identify a significant proportion of families in need of assistance and inappropriately label others.[14] Sorting out eligibility and establishing selective recruitment strategies are costly and may, in the end, again fail to yield the

type of coverage and enrollment levels needed to achieve population-level reductions in key outcomes.

Beyond these implementation challenges, targeted programs, which require that families be identified as having certain economic or personal deficits can be stigmatizing. The very families one hopes to engage in such efforts may refuse participation for fear of being labeled as being inadequate parents. Also, the possible self-identification of a mother as being singled out because she is at risk might inadvertently enhance risk in a perverse self-fulfilling prophecy.

Finally, an assumption of targeted programs such as NFP is that the community context and community service capacity are sufficient to support the program. As David Olds of the University of Colorado, Denver, and his colleagues note, the NFP nurse refers mothers to community services such as substance abuse and mental health treatment to accomplish core outcomes.[15] The nurse relies on these services to be available and of high quality. When programs such as NFP are relatively few in number, providers make limited demands on fragile local service systems. As these targeted models are taken to scale, however, the demands for specialized clinical services dramatically increase, with providers competing with each other to secure the slots that are available for their specific clients. Providers focusing on serving an individual family cannot contemplate system or policy change. Programs operating in isolation play no role in enhancing community service systems, levels, and culture. This political reality may further limit service availability for the most isolated families who are unlikely to seek out and enroll in voluntary programs or who fall outside eligibility boundaries.

Creating A Universal System of Support

Starting in the mid-nineteenth century, our nation made a commitment to public education for all children. The nation persisted in this goal based on the compelling public interest in having an informed electorate and a literate workforce. We did not create a public education system for poor children; we created the standard for all children. At the time that universal public education was debated, it was argued that it should be mandated only for low-income families because wealthier families would meet their educational needs anyway by private sources. That argument lost in favor of the overall public good. By mandating public education to be universal, all children were equally valued and their education was deemed society's collective responsibility. Today, this commitment and collective responsibility is being gradually extended to children between birth and age 3.

Promoting this extension by simply implementing one or even several targeted home-visitation models will not shape the robust prevention system of care required to foster early learning opportunities capable of reducing the performance gap. Extension of model EHS programs has not dramatically improved the kindergarten readiness of the nation's population; expansion of charter schools has not altered the average performance in the nation's urban education programs; and expansion of targeted violence prevention programs has not reduced the nation's violence rate. This is not to say that individuals enrolled in these programs have not benefitted. Unfortunately, these gains, from a population perspective, have been modest and far from transformative.

At present, states are making substantial investments in supporting individual home-visitation models, as well

as developing early intervention systems that support a continuum of services for new parents. Based on reporting from thirty-one states, the National Center for Children in Poverty found the aggregate annual level of support for home-visiting programs in these states exceeded $250 million.[16] A similar survey of twenty-six states conducted by the National Conference of State Legislatures pegged investment levels at $281 million in FY 2008.[17] Although no comprehensive figure is available with respect to the number of families these investments reach, the Congressional Research Service estimates that no more than 3 percent of families with children under the age of six, or 7 percent of those same families with income below 200 percent of the poverty line, are being served.[18]

Realizing population-level change will require communities to develop a preventive system of care that expands access to a range of evidence-based programs.

Even if federal investments in home-visitation services reach the most optimistic levels being proposed in Congress, these resources would allow for doubling the number of families reached, to a total of 6 percent of all families with young children and 14 percent of those living in poverty. Given all the challenges inherent in accurately targeting those at highest risk, in enticing them to enroll and remain in voluntary programs, and in achieving core outcomes, it remains unlikely that even this level of investment will produce population-level change.

The relatively high costs of these interventions underscore the importance of identifying an efficient way to match families with appropriate levels of support. Achieving this level of efficiency is best done, not through an eligibility system based on demographically-based risk, but rather through a comprehensive assessment that identifies the specific needs of participants and refers them to the most appropriate service. Although the cost of such a system has not been well specified, the per participant cost for these assessments is substantially less than providing intensive home-based interventions. For example, Cuyahoga County, Ohio (Cleveland) implemented a two-tiered home-visitation program in 1999 which included a single nurse visit to all first-time and teen parents, followed by more intensive services for those at high risk. Over a five-year period, the universal program screened 34,279 newborns at a cost of $6.3 million ($184 per participant). The county also invested almost $28 million dollars in its intensive home-visitation option which served 9,585 families during the same period at an average cost of $2,921 per participant.[19] In Hawaii, a universal screening program assessed roughly 13,500 newborns annually in FY 2007 and 2008, at a per participant cost of $147.[20] A new universal program in Durham County, North Carolina is devoted to having nurses visit every newborn family one to three times and then matching families in need with community-based services. The universal nurse portion of the program costs approximately $350 per family.[21]

Communities which provide a limited number of home visits to all or most new parents, such as the efforts undertaken

in Cuyahoga County and Durham County, offer opportunities to understand better the needs of new parents and the extent to which resources exist to address these needs adequately.[22] The eventual impacts of this type of embedded system on child development outcomes and parental behaviors are not yet known because studies are now in progress. In part, impacts will be a function of implementation quality, the screening system's ability to identify accurately those in need, and the capacity of local formal and informal resources to meet identified demands. Realizing population-level change will require communities to develop a preventive system of care[23] that expands family access to a range of evidence-based programs.

Sensible Evidence-Based Practice

Defining the evidentiary base necessary for estimating the potential impacts of a given intervention is complex and particularly challenging when the reform involves multiple strategies. Randomized control trials are often the best and most reliable method for determining whether changes observed in program participants over time are due to the intervention rather than to other factors. Maximizing the utility of program evaluation efforts, however, requires more than just randomized clinical trials. As noted by the American Evaluation Association in a February 2009 memo to Peter Orszag, the Director of the Office of Management and Budget:

> "There are no simple answers to questions about how well programs work, and there is no single analytic approach or method that can decipher the complexities that are inherent within the program environment and assess the ultimate value of public programs."[24]

Echoing a similar sentiment, a recent report by the Government Accountability Office concluded that requiring evidence from randomized studies as the sole proof of effectiveness would "likely exclude many potentially effective and worthwhile practices."[25] Although randomized trials offer the most rigorous method for establishing that assignment to a program results in positive outcomes, other research designs and statistical controls may be necessary in some contexts, and they may still allow program evaluators to make reliable and valid estimates of program effects.

Beyond determining program impacts on participants, research is needed to assess how program models or practice innovations address implementation challenges such as staff retention, participant enrollment and retention rates, collaboration with other service providers, and securing diverse and stable funding. Such information is needed not only during the initial stages of implementation but also over time. This type of documentation is essential for determining an intervention's continued viability in light of the inevitable changes that occur within the social fabric and public policy arena.

Conclusion

Empirical evidence supports the efficacy of home-visiting programs and their growing capacity to achieve their stated objectives with an increasing proportion of new parents. Maintaining this upward trend requires more than the dissemination of evidence-based models. Equally important is the task of assessing parental capacity to provide for a child's safety and linking families with services commensurate with their needs. For some families, the matching will be enrollment in intensive home-based interventions. For most families, this process

will serve as a way to raise awareness of local resources that are available in a community to help parents effectively meet the needs of their children and find assistance in times of stress. For the entire community, these assessments will grow service capacity where it is needed most. We believe that approaches that couple universal screening with targeted program delivery are most likely to achieve population-level improvement in child outcomes.

THE NURSE-FAMILY PARTNERSHIP

David Olds

The Nurse-Family Partnership (NFP) is a program of prenatal and infancy home visiting by nurses for low-income first-time mothers. NFP nurses help parents improve 1) the outcomes of pregnancy by helping women improve their prenatal health; 2) children's subsequent health and development by helping parents provide competent infant and toddler care; and 3) parents' economic self-sufficiency by helping them complete their educations, find work, and plan future pregnancies. In three scientifically controlled trials the program produced benefits in each of these targeted areas. Today the NFP is serving over 20,000 families, and is likely to grow substantially with the support of health care reform.

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For more than three decades, our team has developed, tested, and replicated in community settings a program of prenatal and infancy home visiting by nurses known as the Nurse-Family Partnership (NFP). This work is founded on four principles: develop the program well before testing it; test it thoroughly before offering it for public investment; replicate it carefully; and improve it continuously. This approach has contributed to the NFP's being identified as the only early childhood program reviewed to date that meets the Coalition for Evidence-Based Policy's "Top Tier" of evidence,[1] as the program with the strongest evidence that it prevents child abuse and neglect,[2] and as a program that produces significant economic return on investment.[3]

Given our nation's huge disparities in health and educational outcomes and soaring budget deficits, a strong case can be made for focusing scarce public resources where they are most likely to reduce disparities and costs, and for developing effective early childhood services following the approach outlined here, which aligns with recommendations of the National Academies.[4] The goal of this approach is to develop a system of effective, complementary services grounded in scientific evidence that they work.

The Nurse-Family Partnership

Our team carefully developed the NFP before testing it and offering it for public investment. NFP nurses have three major goals to promote: better pregnancy outcomes by helping women improve their prenatal health (for example, cutting down on smoking and obtaining prompt treatment for obstetric complications); children's subsequent health and development by helping parents provide competent care of their infants and toddlers; and parents' economic self-sufficiency by helping them develop a vision for their future and make decisions about staying in school, finding work, and planning future pregnancies that are consistent with their aspirations. The nurses follow detailed visit-by-visit guidelines that they adapt to parents' needs and interests. Using strategies that capitalize on parents' intrinsic motivation to protect themselves and their children, nurses join with parents to improve their prenatal health, care of their children, and economic self-sufficiency.

The goal is to develop a system of effective, complementary services grounded in scientific evidence that they work.

The NFP focuses on low-income women bearing first children for three reasons. First, maternal and child health problems and educational disparities are greater among poor families living in concentrated social disadvantage. Second, women bearing their first children (who account for about 40 percent of the births in the United States) have a natural sense of vulnerability that increases their willingness to engage in this program, in part because it is delivered by nurses who can address with authority their concerns about pregnancy, labor, delivery, and care of fragile newborns. And third, the program is designed to achieve many of its most long-lasting effects by helping parents clarify their aspirations for themselves and their children; this often results in parents choosing to delay future pregnancies until they are positioned to assume responsibility for another child, with benefits likely

carrying over to subsequent children. Today, the program is estimated to cost $4,500 per year per participant over an approximately 2.4-year period.

Evidence of Impact on Health and Costs

The NFP has been tested in three separate scientifically controlled trials over more than three decades with different populations, living in different contexts, and at different points in U.S. social and economic history. The first randomized trial was begun in 1977 in Elmira, New York, with a sample of low-income whites (N=400); the second was begun in 1988 in Memphis, Tennessee, with a sample that was 90 percent African American (N=1,178 for the prenatal phase of the trial and 743 registered in the postnatal phase); and the third was begun in 1994 in Denver, Colorado, with a sample that was 46 percent Hispanic (N=735). The Denver trial systematically examined the relative impact of the program when delivered by paraprofessionals (who lacked college degrees, but were trained and supported well in delivering the program) and by nurses. Before offering the program for public investment, we wanted to make sure that it would work in different contexts and with different populations, and that we had reliable procedures for replicating the model tested in the trials. In at least two of the three trials the NFP produced significant impacts in eight areas, described below.

Improving Prenatal Health. Prenatal health improvements include reductions in prenatal tobacco use, hypertensive disorders of pregnancy, and kidney infections; and improvement in diet.[5] In the Denver trial, for example, nurse-visited women identified as smokers at registration had a reduction (effect size = .50) in cotinine (a biochemical marker of tobacco use).[6] Corresponding effects were found in the Elmira trial.[7] Prenatal tobacco use increases the risk of preterm delivery, low birth weight, and adolescent crime, and is substantially more prevalent in low-income than high-income women.[8]

Reducing Childhood Injuries. In the Elmira trial, there was a 56 percent relative reduction in emergency department encounters for injuries and ingestions during the children's first two years of life.[9] In the Memphis trial there was a 28 percent relative reduction in all types of health care encounters for injuries and ingestions, and a 79 percent relative reduction in the number of days that children were hospitalized with injuries and ingestions during the children's first two years.[10] In both of these trials the impact of the program on injuries was more pronounced among children born to mothers with fewer psychological resources to manage the care of their children while living in concentrated social disadvantage. Injuries are the leading cause of death in children and youth.[11]

Increasing Inter-birth Intervals. Across all three trials, nurse-visited women had longer intervals between the births of first and second children, due to better pregnancy planning. In the Elmira trial, nurse-visited mothers who were unmarried and from low-income households at registration, compared to control-group counterparts, had a 12.5 month greater interval between birth of the first and second child by the time the first child was 4 years of age (effect size = .69);[12] in the Memphis and Denver trials the corresponding increases in interval were 3.7 and 4.1 months (effect sizes = .21 and .32, respectively).[13] Short inter-birth intervals (less than two years) are associated with poor subsequent pregnancy outcomes, a host of child health and development problems,

and compromised parental economic self-sufficiency.[14]

Increasing the Stability of Partner Relationships. Women from the Elmira trial who had been unmarried and from low socio-economic households at registration were over two times more likely to be married fifteen years following the birth of the first child than their control-group counterparts.[15] In the Memphis trial, nurse-visited women were 60 percent to 70 percent more likely to be cohabiting with someone or with the father of the child at child age 5.[16] At child ages 6 and 9, nurse-visited women had more stable partner relationships than did women in the control group (effect size = .23).[17] Marriage and stable partner relationships predict better child and family functioning.[18]

A dedicated source of federal dollars will be essential for the NFP to achieve greater scale and reduce societal costs.

Reducing Families' Use of Welfare (Cash Assistance, Supplemental Nutrition Assistance Program [SNAP], and Medicaid). In the Elmira and Memphis trials, nurse-visited women used government assistance (especially Aid to Families with Dependent Children/Temporary Assistance for Needy Families [AFDC/TANF] and SNAP) for fewer months than did women in the control group.[19] At child age 12, the nurse-control difference in use of AFDC/TANF, SNAP, and Medicaid led to government savings in welfare expenditures that exceeded the cost of the program after discounting and adjusting costs to the same year.[20] The program impact on use of welfare did not hold in the Denver trial, which began just before federal welfare reform was passed and just as the U.S. economy moved into a period of rapid growth in the late 1990s. Nurse-visited women did, however, improve their economic self-sufficiency to a greater extent than women in the control group, while paraprofessional-visited women did not. The return on investment in this area alone exceeded the cost of the program from a societal perspective.[21]

Increasing Maternal Employment and Earnings. Nurse-visited low-income, unmarried women in the Elmira trial worked 82 percent more than their control-group counterparts through child age 4;[22] those in the Memphis trial were twice as likely to be employed at child age 2;[23] and in Denver, there were similar effects for nurse-visited women over time.[24]

Improving Child Language, Cognitive and Academic Functioning among Children Born to Mothers with Fewer Psychological Resources. In the Memphis trial, nurse-visited children born to mothers with low psychological resources had higher levels of academic achievement in the first three years of elementary school compared to their counterparts in the control group (effect size = .33).[25] In the Denver trial, nurse-visited four-year-olds born to mothers with low psychological resources had better language development and executive functioning than control-group counterparts (effect sizes = .31 and .47, respectively).[26] There were no benefits of the program for these types of outcomes among children born to mothers with relatively high psychological resources, that is, those with greater wherewithal to manage caring for their children while living in poverty.

Other Outcomes. In addition, in the Elmira NFP trial, where families have been followed the longest, the program produced long-term reductions on state-verified rates of child abuse and neglect (a 48 percent reduction), and mothers' and children's arrests through the first child's fifteenth birthday (60 percent to 70 percent reductions),[27] and on children's arrests (40 percent) and convictions (60 percent) by age 19 (effects due entirely to reductions among girls at age 19).[28] In the Memphis trial of the NFP, children in the control group were 4.5 times more likely to die in the first nine years of life as were children who had been visited by nurses, a difference in mortality accounted for by deaths due to prematurity, Sudden Infant Death Syndrome, and injuries.[29] Finally, in the Denver trial families opened their doors more to nurses than to paraprofessionals,[30] and nurses produced larger and more consistent effects on maternal and child health and development than did paraprofessionals.[31]

This set of findings has led to acknowledgment of the program's significant impacts by several reviewers.[32] What distinguishes these reviews is their adherence to a similar set of high evidentiary standards: well-conducted randomized trials, replicated effects with different populations, enduring impacts on outcomes of clear public health importance, and programmatic procedures for rigorous replication. Moreover, the Washington State Institute for Public Policy and the Rand Corporation estimate returns on investment in the NFP of about $17,000 per family served, or between $2.80 and $5.70 per dollar invested, with greater returns when the program is targeted on those in greater need.[33]

National and International Replication

As evidence-based programs are moved into policy and practice, there are pressures to water them down as they are scaled up,[34] and it is likely that some attenuation of impact will occur.[35] The economic evaluations produced by the Washington State Institute for Public Policy have built such attenuation into their estimates of return on investment.[36] We have structured the replication of the NFP to resist these pressures and to improve its performance over time.[37] The NFP national replication effort is built upon three principles: that in order to achieve its promise, the NFP must be replicated with fidelity to the model tested in the randomized trials, focusing particularly on high-quality nurse education and support; that programs must monitor implementation and outcomes with NFP's web-based clinical information system; and that resources must be focused on improving implementation and conducting rigorous research to improve the underlying program model. We think of the NFP as a work in progress, and have organized the NFP national replication effort to monitor performance, to understand implementation and program vulnerabilities, and to work constantly on building the next generation of the NFP.

We also are working with the British, Dutch, and Australian governments to develop the NFP in those countries in order to help close gaps in health and education for their most disadvantaged populations.[38] Our model for international replication calls for careful program adaptation to local contexts, formative evaluation of the adapted program, rigorous testing in randomized controlled trials, and faithful replication of the NFP if it improves maternal and child health and is cost effective.

Integration with Existing Public Policies

The NFP draws upon a number of public funding sources to support its current operations, including TANF, Medicaid, tobacco taxes and settlement dollars, child abuse and neglect prevention, juvenile justice, the Social Services Block Grant, and the Maternal and Child Health Block Grant, among others. The NFP provides one mechanism through which public dollars in these funding streams can be spent on evidence-based services consistent with their missions. Current NFP expansion efforts have relied on these funding streams as the program has gone from enrollment of zero families in 1996 to 20,000 at the end of 2009. Having a dedicated source of federal dollars, such as the maternal and child health home-visiting provisions included in the health care reform legislation passed by Congress in early 2010, will be essential for the NFP to achieve greater scale and reduce societal costs at a more accelerated pace. As the national home-visiting program is being implemented, it is useful to examine some of the ways in which the NFP overlaps with current policies aimed at improving the health, education, and economic self-sufficiency of the disadvantaged. What the NFP brings to the domestic policy agenda is a program with unusually rigorous evidence that it can help parents become more competent in caring for themselves and for their children. It complements public policies aimed at improving maternal and child health, promoting school readiness, and reducing poverty.

A fundamental question has to do with who qualifies for the NFP and how they might be registered. A natural point of contact with low-income pregnant women is through their enrollment in prenatal care and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Since 90 percent to 95 percent of teen mothers register for prenatal care before the third trimester of pregnancy,[39] enrolling Medicaid-eligible women in the NFP as they register for prenatal care is sensible. In some states, Medicaid is used to fund part of the cost of the NFP because many NFP services are covered by Medicaid. One provision included in the House-passed health care reform legislation would have simplified Medicaid coverage of prenatal and infancy nurse home visits by giving states the option of covering all eligible nurse home-visitation services under one category rather than the multiple categories currently used,[40] but this was not included in the final bill passed by Congress. If Medicaid funding can be used without compromising the essential elements of the NFP model, Medicaid will be an effective way for states to make this service available to a larger number of families.

One also might make the NFP a home-based option under Early Head Start (EHS). While there is some overlap in the missions of the NFP and EHS, there are differences in program design and delivery standards so some modifications of EHS standards would be required in order for the NFP to be delivered with fidelity to the model tested in the trials. Given strong NFP outcomes in early school readiness and educational achievement, the NFP also may be funded as part of broader efforts to improve education policy and practice.[41] This might include covering the NFP as an evidence-based element in the Promise Neighborhoods initiative,[42] or under the Early Learning Challenge Fund being considered by Congress.[43]

TANF has been used to support the NFP in some states because NFP nurses help low-income families become more economically self-sufficient. The NFP also can be linked with other local, state, and federal sources of support aimed at

increasing low-income parents' completion of community college and improving career development. Nurses help families choose child care options that are safe, developmentally enriching, and available during the hours parents must be away from their child, so the nurses' work aligns with efforts to secure quality preschool and family-based child care for low-income families. Policies aimed at reducing family poverty and promoting healthy marriages and father involvement have missions that overlap with the NFP, and are sensible sources of support given that the NFP helps achieve these goals.

The nurses' work aligns with efforts to secure quality preschool and family-based child care for low-income families.

Finally, the NFP has been identified as having the strongest evidence of any intervention tested to date that it prevents child abuse and neglect,[44] and thus is a natural candidate for funding under the Child Abuse Prevention and Treatment Act. The complexities of channeling many funding streams into the NFP can be so challenging, however, that any further expansion of the program will require a single, dedicated funding stream that recognizes the potential of this program to help improve the life chances of the disadvantaged.

While the nursing shortage may impose some constraints on NFP expansion, especially in rural areas, this issue should be put in perspective. If NFP enrollment were 100,000 families, the program would consume 0.4 percent of the existing nursing workforce.[45] National strategies to address the shortage of registered nurses have called specifically for creating a larger pool of nurses prepared for the NFP, and the Division of Nursing in the Bureau of Heath Professions within the U.S. Department of Health and Human Services is focusing its resources on increasing the number and diversity of well-prepared nurses. Our experience is that over the past decade, increasing numbers of individuals have entered the nursing profession specifically to work in the NFP program. While working in the NFP is not for every nurse, for those committed to serving the disadvantaged it provides a career option with deep personal meaning. These factors make us optimistic that the nursing workforce can be expanded over time to meet the needs of the program as it provides a secure source of employment and opportunity for career development.

Conclusion

Poor children and families in the United States deserve programs that work and taxpayers need to know that their dollars are being spent wisely. The NFP provides a model for serving a segment of the population of vulnerable children and families at a critical stage in human development that can have long-lasting and far-reaching effects in reducing health and educational disparities. The approach outlined here holds promise for developing other effective services for vulnerable populations.