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.

Deborah Daro is a Research Fellow at Chapin Hall at the University of Chicago.

Kenneth A. Dodge is the William McDougall Professor of Public Policy, Psychology and Neuroscience and Director of the Center for Child and Family Policy at Duke University.

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]

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]

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

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.

Endnotes

[1] Ron Haskins, Christina Paxson, and Jeanne Brooks-Gunn, *Social Science Rising: A Tale of Evidence Shaping Public Policy,* Future of Children Policy Brief (Princeton, NJ: Princeton-Brookings, Fall 2009).

[2] Deborah Daro, "The History of Science and Child Abuse Prevention—A Reciprocal Relationship," in *Community-Based Prevention of Child Maltreatment*, eds. Kenneth Dodge and Doriane Coleman (New York: Guilford Press, 2009); Mark Chaffin, "Is It Time to Rethink Healthy Start/Healthy Families?" *Child Abuse and Neglect* 28, no. 6 (2004): 589-595.

[3] Emilie Stoltzfus and Karen E. Lynch, *Home Visitation for Families with Young Children*, report prepared for Members and Comittees of Congress (Washington, DC: Congressional Research Service, July 2009).

[4] Kay Johnson, *State-Based Home Visiting: Strengthening Programs Through State Leadership* (New York: Columbia University, Mailman School of Public Health, National Center for Children in Poverty, 2009).

[5] David L. Olds, Lois Sadler, and Harriet Kitzman, "Programs for Parents of Infants and Toddlers: Recent Evidence from Randomized Trials," *Journal of Child Psychology and Psychiatry* 48, no. 3-4 (2007): 355-391.

[6] Deborah Daro and others, "Open Letter to President Obama Regarding His Proposed FY 2010 Budget and its Investment in Home Visitation," (letter, April 21, 2009). Available at http://www.maine-eccs.org/Daro%20Dodge%20Weiss%20Zigler%20Comments%20on%20Home%20Visiting%20Proposal.pdf.

[7] David L. Olds and others, "Preventing Child Abuse and Neglect with Home Visiting by Nurses," in *Community-Based Prevention of Child Maltreatment*, eds. Kenneth Dodge and Doriane Coleman (New York: Guilford Press, 2009).

[8] Barbara Needell and Richard P. Barth, "Infants Entering Foster Care Compared to Other Infants Using Birth Status Indicators," *Child Abuse and Neglect* 22, no. 12 (1998): 1179-1187.

[9] Deborah Daro and others, "Sustaining New Parents in Home Visitation Services: Key Participant and Program Factors," *Child Abuse and Neglect* 27, no. 10 (2003): 1101-1125.

[10] Neil B. Guterman, *Stopping Child Maltreatment before it Starts: Emerging Horizons in Early Home Visitation Services* (Thousand Oaks, CA: Sage, 2001); Maryam Navaie-Waliser and others, "Factors Predicting Completion of a Home Visitation Program by High-Risk Pregnant Women: The North Carolina Maternal Outreach Worker Program," *American Journal of Public Health* 90, no. 1 (2000): 121-124.

[11] Ann Duggan and others, "Hawaii's Healthy Start Program of Home Visiting for At-Risk Families: Evaluation of Family Identification, Family Engagement, and Service Delivery," *Pediatrics 105*, no. 1 (2000): 250-260; Karen McCurdy and Deborah Daro, "Parent Involvement in Family Support Programs: An Integrated Theory," *Family Relations* 50, no. 2 (2001): 113-121.

[12] Deborah Daro and others, "Sustaining New Parents in Home Visitation Services: Key Participant and Program Factors," *Child Abuse and Neglect* 27 (2003): 1101-1125.

[13] Adrea D. Theodore and others, "Epidemiologic Features of the Physical and Sexual Maltreatment of Children in the Carolinas," *Pediatrics* 115, no. 3 (2005): 331-337.

[14] John E. Lochman and The Conduct Problems Prevention Research Group, "Screening of Child Behavior Problems for Prevention Programs at School Entry," *Journal of Consulting and Clinical Psychology* 63, no. 4 (1995): 549-559.

[15] David L. Olds, Lois Sadler, and Harriet Kitzman, "Programs for Parents of Infants and Toddlers: Recent Evidence from Randomized Trials," *Journal of Child Psychology and Psychiatry* 48, no. 3-4 (2007): 355-391.

[16] Johnson, *State-Based Home Visiting.*

[17] Steffanie Clothier and Julie Poppe, *Early Care and Education State Budget Actions FY 2007 and FY 2008* (Washington, DC: National Conference of State Legislatures, April 2008).

[18] Stoltzfus and Lynch, *Home Visitation for Families with Young Children*.

[19] Robert L. Fischer, Nina Lalich, and Claudia Coulton, "Taking it to Scale: Evaluating the Scope and Reach of a Community-Wide Initiative on Early Childhood," *Evaluation and Program Planning* 31 (2008): 199-208.

[20] Personal communication with Cindy Hirai, State of Hawaii Department of Health, Healthy Start Program Head, Maternal, and Child Health Branch, Family Violence Prevention Program Coordinator (2009).

[21] Kenneth A. Dodge, *Unpublished Report* (Durham, NC, 2010).

[22] Deborah Daro and others, *Welcome Home and Early Start: An Assessment of Program Quality and Outcomes* (Chicago, IL: Chapin Hall at the University of Chicago, 2005); Deborah Daro and Kenneth A. Dodge, "Creating Community Responsibility for Child Protection: Possibilities and Challenges," *The Future of Children* 19, no. 2 (2009): 67-97; Kenneth A. Dodge and others, "Community-Level Prevention of Child Maltreatment: The Durham

Family Initiative," in *Community-based Prevention of Child Maltreatment*, eds. Kenneth Dodge and Doriane Coleman (New York: Guilford Press, 2009).

[23] Patrick H. Tolan and Kenneth A. Dodge, "Children's Mental Health as a Primary Care and Concern: A System for Comprehensive Support and Service," *American Psychologist* 60, no. 6 (2005): 601-614.

[24] American Evaluation Association Evaluation Policy Task Force, *An Evaluation Roadmap for a More Effective Government* (Fairhaven, MA: American Evaluation Association, February 2009).

[25] U.S. Government Accountability Office, *Program Evaluation: A Variety of Rigorous Methods Can Help Identify Effective Interventions*, GAO-10-30GOA (Washington, DC: U.S. Government Accountability Office, November 2009).