Coalition for Evidence-Based Policy
A NONPROFIT, NONPARTISAN ORGANIZATION

Statement of Jon Baron
President, Coalition for Evidence-Based Policy

House Committee on Ways and Means, Subcommittee on Human Resources
Hearing on the Maternal, Infant, and Early Childhood Home Visiting Program

April 2, 2014

Chairman Reichert, Ranking Member Doggett, and Members of the Ways and Means Subcommittee on Human Resources:

I appreciate the opportunity to testify on the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Program. As brief background, the Coalition for Evidence-Based Policy is a nonprofit, nonpartisan organization, established in 2001. We work with federal officials to increase the effectiveness of government social spending through rigorous evidence about "what works," and the core ideas we have advanced have helped shape evidence-based reforms enacted into law and policy during both the Bush and Obama Administrations. We are not affiliated with any programs or program models, and have no financial interest in any of the policy ideas we support, so we serve as a neutral, independent resource to policy officials on evidence-based programs. Our work is funded primarily by national philanthropic foundations.

Brief overview of my testimony

We strongly recommend reauthorization of MIECHV for the following reasons:

- *MIECHV represents an important, bipartisan departure from the usual approach to social spending: it uses scientific evidence of effectiveness as a main factor in determining which activities to fund.*

- *This evidence-based design is important because there is great variation in the effectiveness of different home visiting program activities ("models"). Rigorous studies have identified several models that produce major improvements in the lives of children and mothers – such as 20-50% reductions in child maltreatment – as well as a larger number of models that produce no meaningful effects.*

- *MIECHV's evidence-based design has succeeded, in part, in focusing funds on the subset of effective models; and, with a few modest revisions, it could do even better.*

I. MIECHV represents an important, bipartisan departure from the usual approach to social spending: it uses scientific evidence of effectiveness as a main factor in determining which activities to fund.

A. The usual approach: Most large social programs are set up as funding "faucets," providing monetary support to a diverse array of state/local activities with little regard to evidence about which are effective. This is true, for example, of federal programs like Head Start, Title I at the Department of Education, Foster Care, and the Workforce Investment Act. By design, such programs allocate large streams of money to state and local agencies – sometimes through a funding formula, sometimes through competition – to support a wide range of activities. Rigorous evidence about which activities are effective or ineffective has little say in which activities get funded.

B. <u>The problem with this approach</u>: Activities that produce weak or no effects may get funded in perpetuity under these faucets, whereas highly effective activities may never be funded.

C. <u>MIECHV is different</u>: In both the Bush Administration's 2007 pilot, and the full program as implemented in the Obama Administration, rigorous evidence has been a central criterion used to allocate funds. Specifically, the pilot for MIECHV, as proposed by President Bush and enacted by Congress in 2007, directed the Department of Health and Human Services (HHS) to "ensure that States use the funds to support [home visiting program] models that have been shown, in well-designed randomized controlled trials, to produce sizeable, sustained effects on important child outcomes such as abuse and neglect."[1] Well-designed randomized controlled trials are widely considered the strongest scientific method for evaluating the effectiveness of a program or project.

Similarly, the full MIECHV program, as proposed by President Obama and enacted by Congress in 2010, directs HHS to allocate at least 75 percent of the program's funds to "evidence-based" home visiting models. The full program uses a slightly different, but still rigorous, standard to determine what qualifies as evidence based. It also allows up to 25 percent of the funds to support the implementation of promising new home visiting models, coupled with a requirement for a rigorous evaluation to determine whether they really work. If found effective, these new models can qualify as evidence based, thereby building the number of proven models over time that are eligible for the larger funding amounts.

II. <u>Why it matters</u>: Rigorous studies have identified several home visiting program models that are highly effective, as well as a larger number that are not effective.

Rigorous evaluations, by measuring program models' true effect on objectively important outcomes such as child maltreatment rates, children's cognitive/educational development, and family income, are able to distinguish those that produce sizable effects from those that do not.

A. Home visiting models found highly effective in rigorous evaluations include:

1. <u>Nurse-Family Partnership</u>: Rigorously shown to reduce child maltreatment by 20-50% and, for the most at-risk children, improve educational outcomes (e.g., 8% higher GPA).

The Nurse-Family Partnership (NFP) is a nurse home visitation program for low-income, first-time mothers. NFP has been shown in three well-conducted randomized controlled trials to produce major, long-term improvements in participants' life outcomes, such as: (i) 20-50% reductions in child abuse/neglect and injuries; (ii) 10-20% reductions in mothers' subsequent births during their late teens and early twenties; and (iii) sizable improvements in cognitive and educational outcomes for children of the most at-risk mothers (e.g., 8% higher reading and math grade point averages in grade 1-6).

In addition to these benefits, recently-published reports from the ongoing trial in Memphis, Tennessee show, 12 years after the women gave birth, a $1,113 reduction in annual government spending per woman on welfare, food stamps, and Medicaid during the 12 years. As a result, the total discounted government savings over the 12 years ($13,350) more than offset the program's cost ($12,493).[2]

2. <u>Child FIRST</u>: Rigorously shown to reduce suspected child maltreatment by 33% and to reduce early childhood conduct and development problems by 40-70%.

Child FIRST (Child and Family Interagency Resource, Support, and Training) is a home visitation program for low-income families with young children at high risk of emotional, behavioral, or developmental problems, or child maltreatment. Families are visited in their homes by a trained clinical team consisting of a master's level developmental/ mental health clinician, and a care coordinator.

Child FIRST has been evaluated in a well-conducted randomized controlled trial with a sample of 157 families, carried out in Bridgeport, Connecticut. At the one-year follow-up, the study found 40-70% reductions in serious levels of (i) child conduct and language development problems, and (ii) mothers' psychological distress. At the three-year follow-up, the study found a 33% reduction in families' involvement with child protective services (CPS) for possible child maltreatment.

B. Such examples of effectiveness are a subset that have emerged from testing a larger pool; some other rigorously-evaluated home visiting models have been found to produce few or no effects.

1. **<u>Example</u>: HHS's Comprehensive Child Development Program – a 1990s paraprofessional home visiting program found to produce no meaningful effects on participants' lives.** In this program, trained paraprofessionals provided home visits to families with young children, designed to teach parenting skills and connect families with community services. HHS sponsored a large randomized controlled trial of the program, with a sample of 4410 families at 21 projects sites. At the five-year follow-up, the study found the program was well-implemented, yet unfortunately produced no effects on the hoped-for outcomes, including (i) children's cognitive and social development, (ii) child health, and (iii) parents' economic self-sufficiency.[3]

2. **<u>More generally</u>: Two recent, impartial reviews of the home visiting evidence found several models to be effective or promising, but a larger number to produce no important effects.** One of the reviews, conducted by our organization, examined home visiting studies identified by HHS as high quality randomized controlled trials, to see whether these studies found statistically-significant effects that were of policy or practical importance. The review found three models whose evidence provided "strong" or "medium" confidence that the model produced important improvements in participants' lives, and four others whose evidence provided "low" confidence.[4]

   These findings are consistent with a separate 2009 evidence review by MacMillan et. al., published in *The Lancet*, which found that: "Despite the promotion of a broad range of early childhood home-visiting programmes, most of these have not been shown to reduce physical abuse and neglect when assessed using [randomized controlled trials] …. Two programmes, the Nurse-Family Partnership developed in the USA and the Early Start programme in New Zealand have, however, shown significant benefits.[5]

3. **This pattern, in which only a minority of rigorously-evaluated approaches are found effective, is not unique to home visitation but occurs in most fields where rigorous trials are conducted**, such as medicine, business, K-12 education, and employment/training policy.[6]

C. Thus, if MIECHV were to allocate its funds the usual way – without regard to rigorous evidence – it would likely produce only weak effects, because the impact from the effective models that are funded would likely be diluted out by the lack of impact from the majority of models.

III. MIECHV's evidence-based design has succeeded, in part, in focusing funds on the subset of effective models; and, with a few modest revisions, it could do even better.

A. <u>As an example of MIECHV's evidence focus</u>: roughly two-thirds of its 2013 grant awards are funding implementation of NFP – the model with the strongest evidence of effectiveness, as described above. Another model – Healthy Families America, which has a weaker evidence base – is also being funded in about two-thirds of the grants.[7] (The fraction of MIECHV funding going toward NFP is likely to be lower than two-thirds since the large majority of grantees using NFP are also implementing other models.)

B. We believe this is a major achievement and, based on the evidence cited above, likely to produce important improvements in the lives of thousands of at-risk children and mothers. To confirm whether such effects occur, HHS has commissioned a large randomized evaluation of NFP and three other home visiting models being widely implemented under MIECHV. The study will be able to confirm whether NFP continues to produce the sizable impacts found in prior research; it will also determine whether the other models are able to achieve such impacts.

C. To further strengthen MIECHV's evidence focus, we recommend modest revisions in the statute's standard for determining whether a model is "evidence based." For example, the current standard, as set out in the authorizing statute and implemented by HHS, focuses on whether rigorous evaluations have found that the model produced *statistically-significant* effects, but not on whether these effects have *policy or practical importance*. This has opened a loophole, allowing several models to qualify as evidence based solely on the basis of statistically-significant effects, even if those effects were (i) on trivial outcomes; (ii) so small in size as to be of little practical importance; or (iii) likely to be chance findings (e.g., because the studies measured a large number of outcomes).

<u>As an illustrative examples</u>:

- MIECHV identified the Healthy Steps home visiting model as "evidence based" based on very small, short-term effects, such as a statistically-significant increase in the percent of mothers bringing their child for a doctor visit at one month of age from 95% (for the control group), to 97% (for the treatment group). The effects, found in a well-conducted randomized trial, reached statistical significance only because the trial had a very large sample. Meanwhile, the trial found no effects on any of the more final, policy-important outcomes that it measured (e.g., child behavior, development, social skills, and health/safety at age 5-6).[8]

- MIECHV identified the Parents as Teachers home visiting model as "evidence-based" based on four randomized trials that, as described in HHS's evidence review, measured a total of 208 outcomes and found (i) 5 statistically-significant positive effects (e.g., on child competence in playing with a new toy); and (ii) 6 statistically-significant adverse effects (e.g., on mothers' acceptance of child behavior).[9] Such effects – both the positive and adverse – could easily have appeared by chance given the large number of outcomes measured.[10] Thus, a reasonable interpretation of these findings is that the program produced no important effects one way or the other.

We believe that modest revisions to MIECHV's evidence standard could close this loophole and strengthen MIECHV's focus on models rigorously shown to produce important improvements in participants' lives. As one possible approach, MIECHV might borrow elements of the evidence standard used in the Department of Education's evidence-based Investing in Innovation program.

That program requires evidence from scientifically rigorous studies that the program model has "*a statistically significant, substantial, and important effect on improving student achievement or student growth, closing achievement gaps, decreasing dropout rates, increasing high school graduation rates, or increasing college enrollment and completion rates.*" A similar standard could be used in MIECHV, with appropriate adaptations (including a different set of policy-important outcome measures tailored to home visiting as opposed to K-12 education).

IV. <u>Conclusion</u>: We strongly support the reauthorization of MIECHV, and would welcome an opportunity to work with the Committee on steps, such as the above, to further strengthen the program as the reauthorization process goes forward.

References

[1] Public Law 110-161, and accompanying H. Rept. 110-424.

[2] A summary of the evidence on NFP, including citations to the original study reports, is linked here.

[3] Robert G. St. Pierre and Jean I. Layzer, "Using Home Visits for Multiple Purposes: The Comprehensive Child Development Program," The Future of Children, vol. 9, no. 1, spring/summer 1999, p. 134-151, linked here.

[4] Coalition for Evidence-Based Policy, *HHS's Home Visiting Program: Which Program Models Identified by HHS As "Evidence-Based" Are Most Likely To Produce Important Improvements in Lives of Children/Parents?*, 2011, linked here.

[5] Harriet L. MacMillan et. al., "Interventions To Prevent Child Maltreatment and Associated Impairment," *The Lancet*, vol. 373, January 17, 2009, pp. 250-266, linked here.

[6] Coalition for Evidence-Based Policy, *Practical Evaluation Strategies for Building a Body of Proven-Effective Social Programs: Suggestions for Research and Program Funders*, 2013, p. 1, linked here.

[7] This is based on our review of abstracts of the 2013 MIECHV grants, posted here on MIECHV's website.

[8] Minkovitz, C., Strobino, D., Hughart, N., Scharfstein, D., Guyer, B., & Healthy Steps Evaluation Team (2001). Early effects of the Healthy Steps for Young Children Program. *Archives of Pediatrics & Adolescent Medicine, 155*(4), 470–479. Guyer, B., Barth, M., Bishai, D., Caughy, M., Clark, B., Burkom, D., Tang, C. (2003). The Healthy Steps for Young Children Program National Evaluation. Baltimore: Women's and Children's Health Policy Center, Department of Population and Family Health Sciences, Johns Hopkins Bloomberg School of Public Health. Minkovitz, C. S., Strobino, D., Mistry, K. B., Scharfstein, D. O., Grason, H., Hou, W., Guyer, B. (2007). Healthy Steps for Young Children: Sustained results at 5.5 years. *Pediatrics, 120*(3), 658–668.

[9] Wagner, M., Cameto, R., & Gerlach-Downie, S. (1996). Intervention in support of adolescent parents and their children: A final report on the Teen Parents as Teachers Demonstration. Menlo Park, CA: SRI International. Wagner, M., Clayton, S., Gerlach-Downie, S., & McElroy, M. (1999). An evaluation of the northern California Parents as Teachers demonstration. Menlo Park, CA: SRI International. Wagner, M., & Spiker, D. (2001). Experiences and outcomes for children and families: Multisite Parents as Teachers evaluation. Menlo Park, CA: SRI International. Drotar, D., Robinson, J., Jeavons, L., & Lester Kirchner, H. (2009). A randomized, controlled evaluation of early intervention: The Born to Learn curriculum. Child: Care, Health & Development, 35(5), 643–649.

[10] By design, each test for statistical significance has a 1 in 20 chance of giving a false positive answer – i.e., of finding a statistically-significant positive effect that is due to chance rather than a true program impact. Since the study measured 208 outcomes, it would be expected to produce approximately 10 such chance findings on average.

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April 16, 2014

The Honorable Dave Reichert
Chairman, Subcommittee on Human Resources
Committee on Ways and Means
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Reichert:

Thank you again for the opportunity to testify at the Subcommittee's April 2nd hearing on the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV). I'm writing in response to your follow-up questions about my testimony. The questions, along with my written responses, are as follows:

Question:

How can the Subcommittee apply the evidence-based approach used in MIECHV to major entitlement programs within the Subcommittee's jurisdiction? As noted in your letter, MIECHV's approach of using rigorous evidence of effectiveness as a central factor in determining which program models to fund is lacking in almost every other social program administered by the federal government.

Response:

- **A newly-enacted $200 million initiative in the Supplemental Nutrition Assistance Program (SNAP) shows how an evidence-based approach might work in a major entitlement program.**

  Specifically, section 4022 of the Agricultural Act of 2014 (Public Law 113-79) provides $200 million in mandatory funding for up to10 state pilot projects that provide employment and training assistance to SNAP program participants, designed to increase their workforce participation and reduce their reliance on public assistance. Importantly, the legislation requires a rigorous, independent evaluation of each pilot project, using program and control groups, to determine the project's impact on participants' employment, income, economic well-being, and use of public assistance. Similar demonstration-evaluations in welfare policy in the 1980s and 1990s successfully identified a set of program strategies that increased participants' economic well-being while reducing government spending, and had a major impact on federal and state welfare policy.[1]

- **Building on the SNAP and MIECHV approaches, we suggest the Subcommittee consider incorporating the following evidence-based provisions into major entitlement programs:**

  1. **Provide a modest amount of mandatory funding (similar to what was done in the SNAP initiative) for pilot projects designed to –**

     (a) **Improve participant outcomes without increasing the program's cost; or**
     (b) **Reduce the program's cost without loss of quality or impact on participants' well-being.**

[1] The welfare studies and their policy impact are summarized in: *Increasing the Effectiveness of Social Spending While Reducing Its Cost: An Evidence-Based Approach*, Testimony by Jon Baron before the House Ways and Means Subcommittee on Human Resources, July 2013 (link)

2. **For each project, require a rigorous (preferably randomized) impact evaluation, to determine whether it produces the hoped-for improvements in participants' lives and/or budget savings.**

3. **For projects found, in the above evaluations, to produce such improvements and/or savings, authorize the Secretary to fund/facilitate their larger-scale implementation with program funds** (while ensuring close adherence to the proven approach). We suggest that the legislation allow the administering federal agency to use waivers from law or regulation, where appropriate, to help advance such implementation. The legislation might also require OMB budget-scoring officials to confirm, based on the evaluation findings, that the project is indeed budget-neutral or budget-saving, before the agency can go forward with such implementation.

   Provision 3 would replicate a core feature of MIECHV that currently does not exist in federal entitlement programs: rigorous evidence of effectiveness determines which program strategies/approaches are put into large-scale implementation. Doing so would thereby inject a dynamic for evidence-driven improvements into a social spending process where evidence currently has little role.

Question:

How would you suggest the evidence standard be changed in the current MIECHV statute to ensure models that have been proven to result in significant, meaningful outcomes are the ones that receive the most funding?

Response:

- **As discussed in my testimony, MIECHV's current evidence standard contains a loophole that has allowed a number of unproven and/or ineffective program models to qualify as "evidence based."** Specifically, the current standard, as set out in detailed language in MIECHV's authorizing statute, focuses on whether rigorous evaluations have found that the model produced *statistically-significant* effects, but not on whether these effects have *policy or practical importance*. This has opened a loophole, allowing some models to qualify as evidence based solely on the basis of statistically-significant effects, even if those effects were –

  1. On intermediate or process measures (such as referrals to community services) that may never lead to ultimate, policy-important outcomes (such as parents' employment and earnings);

  2. So small in size as to be of little practical importance; or

  3. Likely to be chance findings (e.g., because the studies measured a large number of outcomes).

  Illustrative examples of models that have qualified as evidence based in MIECHV, based on such effects, are described in my written testimony.

- **We therefore recommend that Congress revise MIECHV's evidence standard to close this loophole, drawing on approaches that have been used in other legislation and programs.**

  Drawing on an evidence standard used in the Department of Education's Investing in Innovation Fund (described in my testimony), as well as that used in Congress' 2007 authorization of the pilot program for MIECHV,[2] we recommend that the Congress replace MIECHV's current standard for "evidence

[2] The Congressional evidence standard in the 2007 pilot was "well-designed randomized controlled trials, [demonstrating] sizeable, sustained effects on important child outcomes such as abuse and neglect." The Congressional language instructed HHS "to adhere closely to evidence-based models of home visitation and not to

based," whose complexity has helped created the above loophole, with a streamlined, rigorous standard as follows:

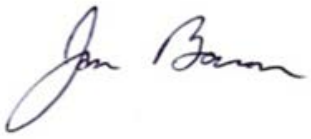
> *An "evidence-based" home visiting model is one that has been shown, in rigorous evaluations that allow for strong causal inferences, to produce statistically-significant, sizeable, and sustained effects on policy-important child and family outcomes (such as child maltreatment, K-12 student achievement, or family income), and not just intermediate outcomes (such as referrals to community services, or positive parenting practices) that may or may not ultimately lead to improvements in policy-important outcomes.*

Such a straightforward statement of principle would send a clear signal to HHS, MIECHV grant applicants, and the larger policy community, that Congress expects MIECHV to fund models backed by strong scientific evidence of policy-important (and not just statistically-significant) improvements in people's lives. As with MIECHV's current authorizing statute, the legislation could charge HHS with developing a more specific evidence standard within this statement of principle.

Because only a few home visiting models would currently meet this new standard, Congress might consider allowing HHS to allocate a portion of MIECHV funding for modest-sized grants to program models that are backed by moderate – but not yet strong – evidence of effectiveness, with a requirement that such models be rigorously evaluated. (This would be in addition to, or instead of, MIECHV's current allocation of up to 25% of its funds for models that are not evidence based.) If found effective, these models can become designated as evidence based and therefore eligible for larger, scale-up funding; if not, their funds would be redirected to other, more promising models. Over time, this would increase the number of evidence-based models, giving state and local grant applicants a larger menu of such models to choose from, and enabling MIECHV to effectively address a wider array of problems in a more diverse set of population groups that are at-risk. The Investing in Innovation Fund follows an approach similar to this, which could be implemented with appropriate adaptations in the MIECHV reauthorizing legislation.

I hope this is helpful in addressing your questions. Please let me know if you have additional questions or would like further information.

Sincerely,



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incorporate any additional initiatives that have not met these high evidentiary standards or might otherwise dilute the emphasis on home visitation." (Public Law 110-161, and accompanying H. Rept. 110-424)