

## **VOICES FROM THE FIELD - Research on Home Visiting: Implications for Early Childhood Development (ECD) Policy and Practice across Canada**

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### ***Policy perspective***

There are now home visiting programs in virtually every jurisdiction across Canada.<sup>1</sup> As in the United States, many of these programs emerged out of pressing policy needs to prevent child maltreatment. Policy-makers are continually challenged to make decisions based on limited evidence, frequently in the absence of rigorous evidence. For example, results from an early evaluation of the Hawaii Healthy Start program were sufficient for the Hawaii state legislature to implement the program across the state, despite the lack of a comparison group in the evaluation.<sup>2,3,4</sup> This pattern of policy-making, which has been common in the history of home visiting, reflects an ongoing tension between advocacy and science.<sup>5,6</sup>

There is now considerable evidence on the effects of home visiting studied under optimal research conditions (i.e. efficacy),<sup>7,8,9,10</sup> including the randomized trials and longitudinal follow-up studies of Olds, Kitzman and colleagues.<sup>11,12,13,14</sup> More importantly for policy, there is also emerging evidence of the effects of home visiting studied under real-world conditions of service delivery (i.e. effectiveness), including the randomized trials of Early Head Start<sup>15</sup> and Hawaii Healthy Start.<sup>3,16</sup>

*This Encyclopedia of Early Childhood Development* contains research summaries by Kitzman,<sup>17</sup> Olds,<sup>18</sup> and Zercher and Spiker,<sup>19</sup> as well as a commentary by Daro.<sup>20</sup> These four papers by pioneers in the field provide a good overview of major recent research findings on home visiting and their implications for policy and practice. The present paper builds on the foregoing by focusing on (a) current gaps in home visiting research; (b) current challenges for home visiting across Canada; and (c) opportunities for home visiting across Canada, with recommendations for future research and evaluation to improve policy and practice, and ultimately the real-world effectiveness of home visiting across Canada.

### **What We Need to Know: Current Gaps in Home Visiting Research**

*Effectiveness of home visiting:* Recent meta-analyses of efficacy studies provide important information to policy-makers in terms of what can be expected from home

visiting programs and the magnitude<sup>7,8,10</sup> and durability<sup>9</sup> of effects. However, far less is known about the effectiveness of home visiting in real-world service delivery settings across different jurisdictions, as discussed in the summaries by Kitzman, Olds, Zercher and Spiker, and Daro.<sup>17,18,19,20</sup>

*Effective ingredients of home visiting:* In light of extensive efficacy evidence on home visiting, there is growing consensus that the field must now move from asking whether early childhood intervention works to asking how it works.<sup>21,22,23,24,25,26</sup> As discussed by Kitzman<sup>17</sup> and Zercher and Spiker,<sup>19</sup> we must identify the effective or “active” ingredients of home visiting. One of the most promising lines of research focuses on the working relationship or alliance between parent and home visitor,<sup>21,23,24,27</sup> as discussed by Kitzman.<sup>17</sup>

*Cost-effectiveness of home visiting:* The relative costs and benefits of home visiting studied under optimal research conditions (i.e. cost-efficacy studies) suggest that, in general, the benefits of home visiting outweigh the costs.<sup>28</sup> It is important to provide policy-makers with information on the relative costs and benefits of home visiting studied under real-world conditions of service delivery (i.e. cost-effectiveness studies), especially amid rising public concerns about government accountability and the public return on public investments. Basic questions of “how much” and “for how long” are foremost in the minds of decision-makers when allocating resources to accomplish policy goals, especially those as complex as facilitating healthy ECD. As Zercher and Spiker note,<sup>19</sup> home visiting has not fulfilled earlier expectations of a low-cost solution to pressing societal problems. Nonetheless, current public investments in home visiting and other ECD programs are relatively minor compared to the costs of major societal problems such as child abuse, which costs Canada an estimated \$15 billion per year.<sup>29</sup>

### **What We Face: Current Challenges for Home Visiting across Canada**

*The human resource challenge:* As the debate on the relative efficacy and effectiveness of paraprofessional vs. professional approaches to home visiting continues (briefly discussed in the summary by Olds<sup>18</sup>), policy-makers face the perennial demand-supply challenge of human needs vs. human resources.<sup>30</sup> Consider, for example, the policy goal of preventing child maltreatment. Researchers have been critical of Canada’s failure to implement evidence-based programs for children.<sup>31</sup> What if policy-makers decided to implement a nurse home visiting program across Canada? In terms of need or demand, conservative estimates of various forms of child maltreatment (under age six) from recent prevalence studies range from 45 to 860 per 100,000.<sup>32,33,34</sup> In contrast, in terms of the human resources supply, there are only 754 nurses per 100,000.<sup>35</sup> Community health nurses – perhaps the most appropriate subgroup of nurses to provide home visiting – represent a mere 68 per 100,000.<sup>35</sup> Given the magnitude of need, there simply will never be enough nurses to meet this demand, even if all existing nurses were redirected from clinical services (e.g. emergency care, long-term care) to this prevention effort.

This human resource challenge is not unique to home visiting. It applies more broadly to all human services, especially those where demand exceeds supply by several orders of magnitude (e.g. mental health). This demand-supply imbalance highlights the policy imperative to reduce the size of the population that requires clinical services through

effective universal and targeted programs.<sup>36</sup> While debates regarding universal vs. targeted approaches continue,<sup>37</sup> the reality is that most home visiting programs are targeted.<sup>10</sup> Yet most programs cannot effectively target families at risk for childhood maltreatment.<sup>38,39</sup> Investments in effective universal programs are therefore a top policy priority.<sup>39</sup>

*The challenge of negative effect:* Infrequently discussed in the early childhood intervention literature is the issue of negative effects (for exceptions, see references 40 and 41). For example, the unintended, unfavourable effects of home visiting for the highest-risk participants in the randomized effectiveness trials of Early Head Start<sup>15</sup> and Hawaii Healthy Start<sup>17</sup> stand in sharp contrast to results from the randomized efficacy trials of Olds and colleagues, where the highest-risk participants appeared to benefit the most from home visiting.<sup>42</sup> The Olds results are similar to the results of other well-known randomized efficacy trials, including the Carolina Abecedarian Program<sup>43</sup> and High/Scope Perry Preschool Program,<sup>44</sup> which both focused on very high-risk samples of children and families. Canada needs more evidence on whether ECD programs delivered in the real world do more good than harm.

### **What We Can Do: Opportunities for Home Visiting across Canada**

*Learning what works in the real world:* As jurisdictions across Canada continue to implement and deliver home visiting programs, funded in part by the historic intergovernmental agreement on ECD, an unprecedented opportunity has emerged to learn what works in the real world on a nationwide scale. This opportunity can be realized if the ongoing challenge of allocating sufficient public resources for rigorous community-based evaluation can be surmounted.

Given that most home visiting programs across Canada are targeted, with many using quantitative measures of risk to assign families to intervention, there is an opportunity for rigorous evaluation using, for example, the regression-discontinuity design (RDD).<sup>45-54</sup> In the RDD, participants are assigned to either the intervention group or control group solely on the basis of a cut-off score on a pre-test measure. The RDD is one of two “convincing quasi-experiments”<sup>48</sup> that stand out because of their high quality of causal inference. The RDD provides an unbiased estimate of treatment effects, just like the randomized experiment.<sup>47,49,53</sup> It “can be used whenever policy dictates that special need or merit should be a prerequisite for access to the particular services whose effectiveness is to be evaluated.”<sup>47</sup> It is therefore an optimal evaluation design for programs that are targeted to the most needful families, including home visiting.

A broader question for policy and practice is the appropriate role of home visiting within the larger system of ECD programs and services, as briefly discussed in the papers by Kitzman and Daro. There is a growing consensus that Canada needs a comprehensive system of ECD, as discussed at a CEECD conference in May 2004\* . Jurisdictions across

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\* *Building a Comprehensive Early Childhood Development System.* The PowerPoint presentations of this conference are available at the following address:

<http://www.excellence-earlychildhood.ca/colloques.asp?lang=EN&docID=5>

Canada urgently need policy evaluation at this system level, where the effectiveness of home visiting can be situated in the context of other ECD programs in their varying combinations and sequences over the first years of life. In order to address this fundamental question, as part of a comprehensive ECD system, jurisdictions across Canada need a nationwide resource network to support rigorous longitudinal evaluation of their ECD investments. ECD evaluation resources include knowledge, skills, expertise and technical assistance. Such resources are not evenly distributed across Canada. Some provinces, but not all, have local access to world-class ECD evaluation capacity. An important question for scientific centres of excellence with nationwide mandates, such as the CEECD and the Canadian Language and Literacy Research Network (CLLRNet), is their future role in such a national network of ECD evaluation resources. This is, of course, a question for the funders of these centres, which include government policy-makers.

Governments need good information to make good decisions. Ultimately, governments will stand or fall on their ability to meet the needs of their constituents, so the question comes full circle to all of us as Canadians. To truly improve the well-being of our children and families, as citizens we must demand that our governments invest our public resources in an effective and comprehensive system of ECD for all Canadians.

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