EFFECTIVE HOME VISITING FOR VERY YOUNG CHILDREN—1

Over the last 30 years, researchers and community agencies concerned with avoiding poor outcomes for at-risk infants and toddlers have developed early intervention home visiting services. This BRIEF explores the outcomes achievable for children and for parents in home visiting programs and describes the variations among home visiting models.

INTRODUCTION

Concern about outcomes for infants and toddlers facing environmental or biological risks has resulted in the piloting and dissemination of a variety of early intervention models. Home visiting evolved as a more effective way to reach at-risk infants and toddlers without requiring parents with one or more young children to come to the staff’s location. Moreover, home visiting has the advantage of allowing for observation and response to aspects of the home environment and day-to-day functioning that would not be observed or reported during an office visit.

Although there is a substantial evaluation literature, the variability in content, format, and outcomes measured of home visiting service models makes it difficult to draw definitive conclusions. This BRIEF reviews what can be accomplished through effective early interventions and the differences among intervention models. The characteristics and logistics of home visiting intervention models will be discussed in the next BRIEFS.1 “Parent” and “mother” are used interchangeably in the text. “Infant” or “child” reference very young children birth to age three.

WHAT HOME VISITING MODELS CAN ACCOMPLISH

Evaluation reports and case studies of interventions for at-risk populations suggest that a variety of positive short term and longer term outcomes—with implications for cost savings—can be achieved through some types of early intervention home visiting for some children and families.

1 These BRIEFS do not cover the outcomes for home visit interventions with pregnant women and the extensive literature on early intervention for premature or handicapped infants and toddlers.
Using randomized assignment to compare families who receive services with those who did not, evaluative studies have variously documented short, intermediate, and long term outcomes for the mother and for the child. Short term outcomes—changes in the mother’s knowledge, beliefs, and attitudes—and intermediate outcomes—changes in the mother’s behavior—are expected to impact the child’s immediate development. The expectation is that these changes will result in age-appropriate development for the child. A very few studies have documented longer term outcomes for the mother and for the child in and beyond the preschool period. 2 Presented in these BRIEFS are the experience and results 3 from a selected number of intervention studies that are illustrative of models widely used in Michigan or ones that could be replicated. There has been no effort to include all single-site evaluated studies in the literature.

OUTCOMES FOR THE PARENT

All home visiting intervention models seek to make changes in the mother’s understanding and behavior that will impact the parent’s interaction with the infant or toddler. These reported changes include:

- increased understanding of child development
- increased sensitivity to infant’s and toddler’s cues and signals; increased parental responsiveness; 4 less intrusion in child’s play; 5 resulting in more synchronous mother-infant interaction 6
- less physical punishment and restriction of infants; increased use of verbal control and other appropriate discipline measures 7
- more stimulating home environment (e.g., provision of play materials) 8

Most home visiting programs seek to increase the mother’s self-efficacy, self-esteem, and sense of control. The presumption is that the parent’s sense of competence with the infant, capacity for problem solving, improved social skills and social support, and reduction in stress directly and indirectly impact outcomes for the infant. Outcomes reported include:

- better life management skills including social competence and
- reduction in depressive symptoms 9
- better relationships with significant other and with family 10

Some studies have documented the outcomes of intervention for life style changes for the mother, including:

- more time between pregnancies and fewer pregnancies 11
- increase in employment and reduction in welfare 12
- avoidance of anti-social behavior (substance abuse and arrests) 13

2 For a discussion of outcomes, see BEST PRACTICE BRIEF No. 5.
3 Full citation information for footnotes can be found in the summaries of home visiting models in BRIEF No.18. Those examples that are not summarized are given full citations. Footnotes refer to summarized models in alphabetical order.
5 Interaction Guidance; UCLA Family Development Project.
6 Brief Intervention for Irritable Infants; Interaction Guidance; Montreal Home Visitation; UCLA Family Development Project.
7 Montreal Home Visitation; Nurse Home Visitation Program (Elmira); UCLA Family Development Project.
8 Healthy Families (Virginia); Montreal Home Visitation; Nurse Home Visitation Program (Elmira, Memphis); Parents as Teachers; STEEP.
10 UCLA Family Development Project.
11 Healthy Families (Virginia); Nurse Home Visitation Program (Elmira, Memphis); STEEP.
12 CCDP (Brattleboro); Healthy Families (Arizona); Nurse Home Visitation Program (Elmira).
13 Nurse Home Visitation Program (Elmira).
Outcomes for fathers that have been reported in a few studies include:

- more fathers participating in care of infant\textsuperscript{14}
- better relationship between the child at five years of age and the biological father\textsuperscript{15}

**OUTCOMES FOR THE CHILD**

**Health outcomes.** Reports include:

- completed immunizations\textsuperscript{16}
- reduced chronic ear infections\textsuperscript{17}
- fewer injuries that require physician, clinic, and emergency room visits\textsuperscript{18}
- fewer ingestions of poisons and foreign objects\textsuperscript{19}

**Less exposure to child abuse and neglect.** Reports include:

- reduced incidence of suspected\textsuperscript{20} or substantiated\textsuperscript{21} child abuse and neglect
- fewer injuries and ingestions—a surrogate measure for reduction in child abuse and neglect
- reduced severity, but not the incidence, of abuse-related injuries. (The home visitor provides “eyes in the home” that deter inappropriate behavior or notice injuries at an early stage.)\textsuperscript{22}

**Measures of age appropriate social-emotional behavior.** Reports include:

- less avoidant, resistant behavior;\textsuperscript{23} more secure attachment\textsuperscript{24}
- ability to calm down (self-regulation)\textsuperscript{25}
- more responsive, cooperative, and compliant behavior with adults\textsuperscript{26}
- more autonomy, exploratory behavior, and curiosity\textsuperscript{27}
- more task oriented\textsuperscript{28}
- more positive relationships with peers\textsuperscript{29}
- fewer behavior problems\textsuperscript{30}
- gains in self help and social development\textsuperscript{31}

\textsuperscript{14} Montreal Home Visitation.
\textsuperscript{15} STEEP.
\textsuperscript{16} Healthy Families (across sites); Johns Hopkins Children and Youth Program; Montreal Home Visitation Program; Nurse Home Visitation Program (Elmira, Memphis).
\textsuperscript{17} Johns Hopkins Children and Youth Program.
\textsuperscript{18} Johns Hopkins Children and Youth Program; Montreal Home Visitation; Nurse Home Visitation Program (Elmira, Memphis).
\textsuperscript{19} Johns Hopkins Children and Youth Program; Nurse Home Visitation Program (Elmira, Memphis).
\textsuperscript{20} Johns Hopkins Children and Youth Program.
\textsuperscript{21} Nurse Home Visitation Program (Elmira); Parents as Teachers (teen mothers receiving both PAT and case management).
\textsuperscript{23} Lieberman (see footnote 4).
\textsuperscript{24} Brief Intervention for Irritable Infants; UCLA Family Development Project.
\textsuperscript{25} Brief Intervention for Irritable Infants.
\textsuperscript{26} Brief Intervention for Irritable Infants; Nurse Home Visitation Program (Memphis); UCLA Family Development Project.
\textsuperscript{27} Brief Intervention for Irritable Infants; UCLA Family Development Project.
\textsuperscript{28} UCLA Family Development Project.
\textsuperscript{29} Brief Intervention for Irritable Infants.
\textsuperscript{30} Brief Intervention for Irritable Infants; Lieberman (see footnote 4).
\textsuperscript{31} Parents as Teachers (children of Spanish-speaking Latina mothers).
Cognitive development outcomes. Reports include:
- increase in mental development scores\(^{32}\)

Long term outcomes measured have included
- the adolescent’s avoidance of health threatening and anti-social behavior (less tobacco and alcohol use, fewer sex partners, and fewer arrests) at age 15.\(^{33}\)

Implications for Practice
There is considerable variation in the significant outcomes reported from evaluation studies. The variation reflects omissions in what is measured—a consequence of differences in orientation and objectives—as well as actual discrepancies in the accomplishment of significant change.

It would be helpful to practitioners and policy makers seeking to draw conclusions if evaluators and researchers, regardless of orientation, could agree on a minimum standard set of outcomes (and measurement protocols) that could be used across all studies.

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**SUGGESTIONS FOR STANDARD OUTCOMES**

**Parent**
- Responsiveness to infant’s cues
- Stimulating home environment
- Reduction in child abuse potential
- Reduction in symptoms of depression
- Increase in social support
- More time between pregnancies and fewer pregnancies

**Parent-infant interaction**

**Child**
- Up-to-date immunizations
- Reduction in physician and emergency room visits for injuries, ingestions
- Reduction in substantiated child abuse
- Age appropriate physical, social-emotional, cognitive, and language development

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\(^{32}\) Healthy Families (Virginia); Nurse Home Visitation Program (Elmira); children of poor unmarried adolescents increased by 10 points over controls at 12 and 24 months of age; Memphis); Parents as Teachers (children of Spanish speaking Latina mothers); STEEP. Characteristically, gains are not sustained over time in the absence of good school programming.

\(^{33}\) Nurse Home Visitation Program (Elmira)
HOME VISITING MODELS have involved
- home visiting alone
- home visiting and parent group meetings
- home visiting as an adjunct to a pediatric care clinic

SOME CENTER-BASED/HOME VISITING MODELS have included
- home visits followed by centered-based services as the child becomes older
- home visits concurrently with center-based services

POPULATION ENROLLED may be
- any parent
- poor/adolescent/single parents
- parents identified by measures of risk for child abuse and neglect
- any infant
- infants physically or temperamentally at risk
- parents and infants with evidence of poor attachment

FAMILY STATUS may be
- families with firstborns only
- families with any number of children

FOCUS may be
- child
- child through the parent
- parent-child
- directed at a single outcome
- directed at multiple outcomes

INTERVENTION may be designed to
- change mother’s behavior
- change mother’s perceptions and expectations derived from past and present experiences
- strengthen parent-infant interaction
- change infant’s behavior
- change the context—environmental stressors and relationships
- some or all of the above

INTERVENTION may be primarily
- service-based—access to services
- information-based—education and guidance
- behavior-based—targeted, observational
- relationship-based—interactive, therapeutic

THEORETICAL BASE may be
- self-efficacy—parent’s life management and social skills, competence with infant
- ecological—family system, environmental stress factors
- attachment—parent’s responsiveness to infant, infant’s secure attachment to the parent

OUTCOMES may be related to
Child
- physical well-being
- social-emotional development and well-being
- cognitive and language development
- experience of abuse and neglect

Parent
- parenting capability
- life management skills
- mental health
- life style changes

LOGISTICS
Time of enrollment may be
- pregnancy
- birth/first months
- infant’s first or second year

Recruitment may be
- proactive, systematic review
- reactive, by referral
- both

Frequency of visits may be
- weekly
- every other week
- monthly
- declining frequency
- more frequently than normal; schedule based on need
- related to timing of clinic visits

Length of Service
- brief, time limited
- not beyond first year of life
- potential of 3 years, 5 years
- based on need/accomplishment of goals

Continued on next page
WHAT DETERMINES GOOD OUTCOMES?

Although home visiting is generally identified as a “service model,” in fact there are multiple models of home visiting. The variability in content and format across evaluated services is so extensive that it is difficult to draw conclusions about what aspects of programming make for good outcomes. Nonetheless, it is clear that the characteristics of the model selected—both the conceptual framework and logistical issues—and the characteristics of the population served in relation to the model have significant influences on the achievement of outcomes. Because of the number of factors that can impact effectiveness, program designers, developers and funders should be careful in their design and implementation and realistic and reasonable in their expectations.

Summaries of the home visiting models referenced are included in the next BRIEF, No. 18. BRIEFS Nos. 19 and 20 will consider the characteristics of models and their relationship to outcomes.

THERE IS NO ONE MODEL OF HOME VISITING, continued

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HOME VISITING MODELS COVERED IN THESE BRIEFS

Selection of models involving home visiting was based on (1) wide use in Michigan and/or elsewhere, or (2) positive outcomes based on random assignment to service and control groups and analysis providing generalizable information. Summaries of these models can be found in the next BRIEF, No.18.

- **Brief Intervention for Irritable Infants**—implemented in several sites in The Netherlands
- **Building Strong Families**—a curriculum implemented in multiple sites
- **Comprehensive Child Development Program** (CCDP)—former federally funded case management model in 21 sites
- **Early Head Start**—federally funded parent-infant services across the country
- **Healthy Families America**—implemented across the country
- **Home Visiting as an Adjunct to Health Care**—two models each implemented in one site; one model implemented in multiple sites with foundation funding
- **Infant Mental Health Services**—implemented in multiple sites in Michigan
- **Interaction Guidance**—university-based model; training has been available for implementation elsewhere
- **Nurse Home Visitation Program** (NHVP)—implemented in three sites as pilots and currently being disseminated
- **Parents as Teachers** (PAT)—a home visiting model implemented across the country and a curriculum used in conjunction with other models
- **Steps Toward Effective Enjoyable Parenting** (STEEP)—implemented in several sites in Minnesota
- **UCLA Family Development Program**—university-based model

REFERENCES


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