The Healthy Steps for Young Children program is a national initiative developed by pediatricians from Boston University in collaboration with professionals from the Commonwealth Fund. This program for families with young children (birth to 3 years of age) provides developmentally-oriented services within pediatric primary care through addition of a Healthy Steps Specialist to pediatric teams—a nurse, child development expert, or social worker who has special training in child development and who becomes the families' primary resource. The first of these two papers describes the rationale behind the Healthy Steps program and its major features. The second paper provides an overview of an evaluation and reports early program findings when infants were 2 to 4 months old. Findings indicate positive changes in parents' knowledge, beliefs, and practices, and improved child outcomes for intervention parents, compared to control group parents. (EV)
The Healthy Steps for Young Children Program

And

Effects of the Healthy Steps for Young Children Program at 2-4 Months

Head Start National Research Conference
Washington, D.C.
June 28-July 1, 2000
The Healthy Steps for Young Children (HS) program, an initiative of the Commonwealth Fund, seeks to enhance the development potential of young children, (birth to 3 years of age) and to strengthen the involvement of parents in their children's early development by orienting the practice of pediatrics to emphasize child development and parenting competence. The Healthy Steps program has implemented and is evaluating a new model of pediatric practice designed to achieve this goal. A significant component of this model is the inclusion in primary pediatric care of a new health care professional with a focus on child development, the Healthy Steps Specialist (HSS).

The first paper in this symposium will describe the rationale behind the Healthy Steps program and its major features. The second paper will describe an overview of the evaluation and report early program findings at 2-4 months.
The Healthy Steps for Young Children Program is a national initiative developed by pediatricians from Boston University in collaboration with professionals from the Commonwealth Fund. The program was launched in 1994 and has since partnered with close to 70 funders. Currently, there are 15 national evaluation sites and 9 affiliate sites at which nearly 4,500 families receive services.

The program responds to several important realities of modern American life, including new research on early brain development. Evidence is accumulating that early experiences and relationships, especially in the first three years of life, are crucial to the development of the brain. The Healthy Steps program, developed for children of this age, is intended to enhance the developmental potential of children based on the premise that a whole child whole family approach can effectively be accomplished through the health care system. Within pediatric primary care, parents and children receive developmentally-oriented services that emphasize the physical, emotional, and intellectual growth and development of young children. The purpose and design of the program is to respond to what parents say they want and feel they have not gotten from the health system particularly guidance on behavioral issues.

The Healthy Steps approach has three underlying premises: the first three years are critical for both the child and family; relationships between parents and children are key to healthy growth and development; and an expanded approach to pediatric care that centers on the child’s health as a whole and that strengthens relationships is needed.

The initiative calls for a new member to be added to the pediatric teams – the Healthy Steps Specialist – a nurse, child development expert, or social worker, who has special training in child development and who becomes the families’ primary resource. The Healthy Steps Specialist, in conjunction with the Healthy Steps physician, provides the following services:

- **Enhanced Well Child Care** is designed to answer questions parents may have about their child’s upcoming developmental stages, administer physical and developmental check-ups. This includes the use of “teachable moments,” which enable pediatricians and Healthy Steps Specialists draw on observations of child and parents to communicate information about behavior and temperament. Early literacy activities are also provided as part of the Reach Out and Read program.
- **A sequence of Home Visits** by Healthy Steps Specialists reach families in an environment where parents may feel more comfortable voicing concerns.
- **A Child Development Telephone Information Line** is available for parents to call healthy Steps Specialists with child development or behavior issues.
• **Child Development and Family Health Check-Ups**, starting at 6 months, detect developmental or behavioral problems, provide “teachable moments,” and identify family health risks that might adversely affect the child’s health and development.

• **Written Materials** for parents emphasize prevention and promote healthy child development.

• **Parent Groups**, facilitated by Healthy Steps Specialists, are provided at office sites to interweave information and support.

• **Linkages to Community Resources** provided both in the form of binders of community resources and parent-to-parent bulletin boards.

In order to use the Healthy Steps components to successfully transform practices into an interdisciplinary approach, pediatric clinicians and Healthy Steps Specialists are trained by the Boston University School of Medicine. The training includes interactive strategies and case-based problem solving. After the training, Healthy Steps Specialists participate in biweekly technical assistance calls with the Boston team.
Title: Effects of the Healthy Steps for Young Children Program at 2-4 months

Authors: Cynthia Minkovitz, MD, MPP, Donna Strobino, PhD, Daniel Scharfstein, ScD, Janice Genevro, PhD, Nancy Hughart RN, MPH, Mary Benedict DrPH, Bernard Guyer MD, MPH

The Healthy Steps Program (HS) relies on a pediatric clinician – child development specialist partnership to enhance developmental services. Pediatricians historically focus only a small proportion of well baby visits on behavior or development. Findings from the recent Future of Pediatric Education II Project suggest that optimal child care in the 21st century will require more emphasis on prevention and that child health professionals, such as developmental specialists, may play a greater role in direct patient contact in order to meet the needs of children and families.

An evaluation of HS is being conducted at 15 sites across the country. At each of 6 randomization design (RND) sites, approximately 400 children have been assigned randomly to intervention and control groups of 200 children each. At 9 quasi-experimental design (QE) sites, an intervention practice and a similar comparison location have been selected and up to 200 children are being followed at each. Children in the control group receive routine pediatric care but have no exposure to the HS Specialist or to HS materials.

The evaluation will assess whether HS leads to specific changes in parents' knowledge, beliefs, and practices, and in improved child outcomes. To determine whether some of these desired outcomes were being achieved in the early stages of the program, when children were 2-4 months old, interviews with mothers were conducted for 2631 intervention (response rate 89%) and 2265 control (response rate 87%).

Analyses were conducted separately for RND and QE sites, and adjusted for baseline differences between intervention and control groups. Hierarchical linear models were used to obtain overall unadjusted and adjusted effects of HS, while accounting for within-site correlation of outcomes.

By the time their infants reached 2-4 months of age, intervention parents were considerably more likely than control parents to report receiving 5 or more HS services, receiving home visits, and discussing 5 topics related to infant development. They also were more likely to identify someone at the practice going out of their way to help them and less likely to be dissatisfied with help or listening from the doctor or nurse practitioner.

Moreover, intervention mothers were less likely to place their newborns in the prone sleep position, a position not recommended by the American Academy of Pediatrics and one that has been shown to place vulnerable infants at risk for sudden infant death syndrome (SIDS).

The program did not affect continuation of breast-feeding, once adjustment was made for baseline differences at QE sites. Differences in the percentage of parents who showed picture books to these young infants were found only at the QE sites and may reflect factors unrelated to HS.

Intervention families received more developmental services in the first 2-4 months of life and were happier with care received than were control families. Future surveys will determine whether these findings persist and translate into
improved language development, better utilization of well child care, and cost effects.


# The Healthy Steps for Young Children Program and Effects of the Healthy Steps for Young Children Program at 2-4 months

**Title:** The Healthy Steps for Young Children Program and Effects of the Healthy Steps for Young Children Program at 2-4 months

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