Nurse-Family Partnership:
Helping First-Time Parents Succeed

Overview of Program

The Nurse-Family Partnership[1] is a highly acclaimed, well tested model that improves the health and social functioning of low-income first-time mothers and their babies. Key highlights of the major findings on maternal and child outcomes from two randomized clinical trials in Elmira, NY and Memphis, TN are:

- 25% reduction in cigarette smoking during pregnancy among women who smoked cigarettes at registration
- 56% fewer hospital emergency room visits where injuries were detected
- 79% reduction in rates of child maltreatment among at-risk families from birth through the child's 15th year
- 43% reduction in subsequent pregnancy among low-income, unmarried women by first child's fourth birthday (31% reduction through age 15, with two years' greater interval between birth of first and second children)
- 83% increase in the rates of labor force participation by first child's fourth birthday
- 30 month reduction in AFDC utilization among low-income, unmarried women by first child's 15th birthday
- 44% reduction in low-income, unmarried mothers' behavioral problems due to alcohol and drug abuse over the 15 years following program enrollment
- 69% fewer arrests among low-income, unmarried mothers over the 15 years following program enrollment
- 54% fewer arrests and 69% fewer convictions among the 15 yr. old children of mothers enrolled in the program
- 58% fewer sexual partners among the 15 yr. old children of mothers enrolled in the program
- 28% fewer cigarettes smoked and 51% fewer days consuming alcohol among the 15 yr. old children of mothers enrolled in the program

[1] So far, the efficacy of the Nurse-Family Partnership has been established for home visits done by nurses. There are versions of home visitation programs that use paraprofessionals as visitors, and the Prevention Research Center for Family and Child Health is currently testing one such version in Denver. However, whether the paraprofessional approach works and, if so, how it compares to nurse-based models, remains to be determined.

In the program, nurse home visitors work intensively with families to improve three broad domains of functioning. Current theory suggests that improving these aspects of the prenatal and early childhood periods are critical for achieving long-term improvements in the life course of at-risk families. Starting in pregnancy, the program addresses women's health behaviors related to substance abuse (smoking, drugs, alcohol) and nutrition, significant risk factors for preterm delivery, low birthweight, and infant neurodevelopmental impairment. After delivery, the emphasis is on enhancing qualities of family caregiving for infants and toddlers, thereby preventing child maltreatment (a condition that the U.S. Advisory Board on Child Abuse and Neglect has called a national emergency) and childhood injuries (the leading cause of childhood mortality among children aged one to fourteen). The program focuses on preventing unintended subsequent pregnancies, school drop out, failure to find work, and welfare dependence - factors that conspire to enmesh families in poverty and that increase the likelihood of poor subsequent pregnancies for the mothers and suboptimal care of their children. In order to maximize outcomes, the program works to improve environmental contexts by enhancing informal support for families and by linking them with needed health and human services.

The programmatic elements of the intervention have been refined over the past 20 years and detailed visit-by-visit guidelines have been prepared to support home visitors in their work with families. Additionally, effective methods of training and record keeping have been developed to support realization of the goals and objectives of the program by each community that adopts it. These components are designed to help ensure that the outcomes reached in the previous large-scale randomized trials are also achieved in subsequent implementations of the program.

Key Program Components and Rationale

Research and experience have found certain aspects of the program to be important to its effective operation and to its ability to produce consistently good outcomes for mothers and their children.

Nurse home visits begin during pregnancy and continue for two years after the child is born.

Beginning the program during pregnancy enables the home visitor to establish the necessary rapport with parents. It is during pregnancy that first-time parents have questions and special needs regarding the biological, psychological, and social changes they are or will be experiencing. They need and want the kind of information that a caring home visitor can provide. By contrast, waiting to offer help until the baby is born *may* be interpreted by parents as indicating that they've made mistakes or can't be counted on to care properly for their child. And most importantly, only by beginning services during pregnancy can the health-related behaviors known to affect low birth weight and prematurity (e.g., smoking, alcohol and drug use, poor nutrition, failure to detect and control urinary and vaginal infections) be positively influenced.

The ideal point to start home visits is sometime between the 14th and 24th week of pregnancy. Beginning services earlier than this does no harm but may not be the best use of limited resources, while beginning services later appreciably lowers the chances of affecting birth outcomes. However, for extremely high risk women, experience suggests that enrollment in the program any time before delivery

can enable the establishment of the type of helping relationship with a nurse home visitor which will carry over effectively into the infancy and early childhood period.

Once rapport is established during pregnancy, visits continue to occur through the first two years of the child's life. This is a crucial time in the development of the relationship between mother and child. It is when effective qualities of parenting need to be established. What happens during this formative period will have profound effects on the longer term life course of both mother and child.

The program targets first-time mothers.

Given the emphasis on prevention rather than treatment of existing problems, the program is likely to benefit most those women who are having their first child. The skills and resources these mothers develop in coping with their first pregnancy and child set a pattern for their parenting of any children they have later. Also, it will normally be easier for women to return to school and work if they have only one child.

Within the population of first-time mothers, it is possible to narrow those served to one or more subsets of this population without undercutting the program's effectiveness. Limiting the first-time mothers served by age, race/ethnicity socioeconomic status, or other appropriate factors allows the program to be adapted to different community circumstances and to fit within available resources. Knowledgeable staff at the National Center for Children, Families and Communities (NCCFC) in Denver are able to help a community determine the specific group it will try to reach with the program.

Nurse home visitors follow a visitation schedule that varies over the two and a half years:
- **weekly visits during the first month following enrollment;**
- **bimonthly visits for the remainder of the pregnancy;**
- **weekly visits during the first six weeks after delivery;**
- **bimonthly visits thereafter through the 21st month of childhood; and**
- **monthly visits until the child reaches age two.**

The visitation schedule has been designed to meet two needs: (a) to enable the nurse home visitor to provide the different services and information required during the different phases of pregnancy and early childhood, and (b) to foster the setting of small, achievable goals for the visitor and family to work on between visits. This second need is quite significant in that families in the program generally make progress most readily when it occurs in manageable, incremental steps.

The actual timing and frequency of visits will depend on the home visitor's judgment and the family's own situation. While it is important to follow the planned schedule, adjustments may have to be made from time to time. In making decisions regarding varying the timing and frequency of visits, consideration needs to be given to data from our previous trials which shows that the overall quality of the infant caregiving environment is higher among families who receive a higher intensity of service (combined total hours of home visit and telephone contact with family). As a general rule, the more at risk the family, the

more often visits need to be made.

Nurse home visitors work with families following the comprehensive focus of the program on personal health, environmental health, quality of caregiving for the infant and toddler, maternal life course development, and family and friend support.

This content represents the core of the program and is well grounded in both theory and practice. While more narrowly focused programs may attain results in limited areas, the comprehensive focus of this program is responsible for the unprecedented results that previous clinical trials of the model have substantiated. Obviously, how the content is delivered will vary somewhat from one family and visitor to the next, although getting to all of it during the time a family is in the program is important. Specific clinical strategies are included in the visit protocols and training materials to help families develop the knowledge and skills needed to successfully manage their lives across these domains of functioning.

Nurse home visitors are expected to link families with the other community health and human services they may need.

One of the most important roles that nurse home visitors play is helping families identify their needs and then gain access to the community resources that can meet those needs. It is the combination of the schedule of home visits, during which families develop trust with a caring professional, gain usable information, and set goals for themselves, and the access to and use of other services in the community, that enables families to further develop strengths and achieve their goals.

A full-time nurse home visitor should carry a caseload of no more than 25 families.

The comprehensiveness of the model, the visit schedule, and the overall intensity of the intervention preclude larger caseloads if the program is to achieve the results anticipated. The nurse home visitor is expected to carry the same caseload of families for the full duration of the program. Experience in the program to date indicates that continuity in the relationship between the nurse home visitor and the family is a critical factor in achieving desired outcomes. This continuity is best realized when the size of the caseloads are kept within manageable limits.

A balanced caseload of less demanding and more demanding cases is also desirable. Results from previous clinical trials suggest that the program has differential effects on outcomes as a function of the parents' personal and social resources. For example, the impact of the program on decreasing welfare dependency is evident among mothers with greater personal and social resources (i.e., higher intellectual and mental health functioning). Whereas, the impact of the program upon children's encounters with the health care system for injuries and ingestions during the first two years of life is greatest among those born to low-resource women. Thus, a balanced caseload of high/low resource mothers is most likely to yield the reduction in government expenditures reported in previous trials. Such a balanced caseload also is essential to maintaining a caseload of 25 families per nurse home visitor. A caseload comprised of a disproportionate number of low resource women would necessitate more frequent home visits and, thus, reduce the size of the caseload that could be managed by the nurse home visitor.

Experience further indicates that nurse home visitors should have baccalaureate preparation in nursing, prior experience working with maternal/child populations, strong interpersonal skills, and sensitivity to the values and beliefs of differing racial and ethnic minorities. While nurse home visitors need not be matched with families on the basis of race or ethnicity, there are obvious advantages in composing a culturally varied team of nurses to carry out the program.

A given team of nurse home visitors should have a nursing supervisor to provide guidance and oversee program implementation.

Supervisors hold individual supervisory conferences with nurse home visitors once a week as well as a weekly case conference in which all visitors participate. Observations of how each home visitor is carrying out the program with participating families is normally done quarterly. Supervisors also play a vital role in developing collaborative relationships with other health and human service providers upon whom the home visitation program may depend for ancillary services and supports. Ideally, the supervisor organizes regular, periodic, multidisciplinary case consultation so the nurses learn over time from the perspectives of practitioners in other disciplines such as mental health, social work, or child development. The supervisor should assess the strengths and needs of each of the nurse home visitors, and arrange ongoing professional development and consultation to strengthen each nurse's competency over time, and the overall strength of the nursing team.

Although there is no hard and fast rule on the optimum number of nurse home visitors a supervisor can effectively supervise, it is strongly recommended that a full-time supervisor have responsibility for no more than eight to ten home visitors during the time the program is first being established.

The program needs to be located in and operated by an organization with standing in the community.

The organization should have a history of stability and effectiveness in the community, good relations with other health and human service providers, and the ability to acquire the resources to implement the program. It is preferred, although not required, that the organization be a health care provider. Such organizations are likely to have in place already some of the supporting mechanisms needed to operate the program cost effectively, such as personnel systems familiar with the recruitment of nurses, staff development programs to assure that personnel have the necessary competencies, and basic equipment needed for home visits (e.g., blood pressure monitors, fetoscopes, otoscopes, infant scales, etc.).

Records need to be kept on families and their needs, services provided, and progress and outcomes realized.

A well-designed and maintained record-keeping and clinical information system has proven to be both clinically and administratively useful in the successful operation of the program. It is important that relatively specific information be collected so that those operating the program locally can monitor their own performance and the developers of the program at the NCCFC in Denver can provide useful

Cost estimates for the training and program materials necessary to begin implementation of the program are available upon request as these vary by the number of participants per training session and the location.

Costs for Program Implementation

Based on our experience to date, we have developed cost estimates for program implementation that can serve as a guide to local communities in procuring funds for the program. We estimate the three year cost to establish a program for 100 families as $780,000. Cost estimates for greater or fewer families can be provided as well. Economic analyses demonstrate that the cost of the program to government is recovered with small dividends by the time children are four years of age. Cost savings accrue further over time.

Participation in the Nurse Home Visitation Program Demonstration Project

We are working to establish approximately 100 selected sites to demonstrate the feasibility of moving this program model into practice on a larger scale and in varied settings. If you have additional questions about the program model or the evidence for its effectiveness, or you have interest in participating in the demonstration program, please contact the following individuals:

For more information:

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