

**PROGRAM GOAL**

**ACTIVITIES**

**SHORT-TERM OUTCOMES**

**INTERMEDIATE OUTCOMES**

**LONG-TERM OUTCOMES**



**Nurse-Family Partnership  
Theory of Change Logic Model**

**IMPROVE pregnancy outcomes by helping women improve prenatal health**

Home visits weekly the first month following program enrollment, then every other week until birth of infant. Nurses address:

- Effects of smoking, alcohol and illicit drugs on fetal growth, and assist women in identifying goals and plans for reducing cigarette smoking, etc.;
- Nutritional and exercise requirements during pregnancy and monitor and promote adequate weight gain;
- Other risk factors for pre-term delivery/low birth weight (e.g., genitourinary tract infections, pre-eclampsia);
- Preparation for labor and delivery/childbirth education;
- Basics of newborn care and newborn states;
- Family planning/birth control following delivery of infant;
- Adequate use of office-based prenatal care; and
- Referrals to other health and human services as needed.

Pregnant women display improved health behaviors.  
 ↓ cigarette smoking  
 ↓ pregnancy-induced hypertension  
 ↑ use of community resources

Newborns are ≥37 weeks gestation & weigh 2500 grams or more.  
 ↓ pre-term delivery among smokers  
 ↑ birth weight among young teens (<17 years)  
 ↓ neurodevelopmental impairment

**IMPROVE child health and development by helping parents provide sensitive and competent caregiving**

Home visits weekly postpartum period, every 2 weeks until toddler is 21 months, monthly until child is 2 years. Nurses:

- Educate parent on infant/toddler nutrition, health, growth, development and environmental safety;
- Role model PIPE activities to promote sensitive parent-child interactions facilitative of developmental progress;
- Assess parent-child interaction, using NCAST sleeping and teaching scales and provide guidance as needed;
- Assess infant/toddler's developmental progress at selected intervals using Ages and Stages Questionnaire or DDSII, and provide guidance as needed;
- Promote adequate use of well-child care;
- Guidance to new parents in building and fostering social support networks;
- Guidance assessing safety of potential/actual child care arrangements; and
- Referrals to other health and human services as needed.

Parents demonstrate sensitive and competent caregiving for infants and toddlers.  
 ↓ childrearing beliefs associated with child maltreatment (Bavolek AAPI)  
 ↓ verified cases of child abuse & neglect  
 ↓ incidents of child injuries or ingestions  
 ↑ stimulating home environments, i.e., increase in appropriate play materials (HOME Inventory)

Child displays age and gender appropriate development.  
 ↓ language & cognitive/mental delays  
 ↑ more responsive in interactions with mothers (NCAST)/less distress to fear stimuli

Early Childhood (4-6 yrs):  
 ↓ safety hazards in home  
 ↑ stimulating home environment - HOME score  
 ↓ incidents of injuries & ingestions noted in medical records  
 ↑ Preschool Language Scale scores  
 ↑ Executive Functioning Composite scores  
 ↓ problems in clinical range on Achenbach CBCL

Adolescence (15 yrs):  
 ↓ state-verified reports of child abuse and neglect from 0-15 years  
 ↓ arrests and adjudication for incorrigible behavior (e.g. truancy, destroying property)

**IMPROVE parental life-course by helping parents develop a vision for their future, plan subsequent pregnancies, continue their education and find work**

Home visits weekly during postpartum period, every 2 weeks until toddler is 21 months, monthly until child is 2 years. Nurses:

- Facilitate decision-making regarding planning of future children and selection of birth control to achieve goals;
- Assist parents to set realistic goals for education and work, and identify strategies for attaining goals;
- Coaching parents in building and fostering relationships with other community services;
- Parents' family planning, education and work goals; and
- Referrals to other health and human services as needed.

Parents have developed plans for economic self-sufficiency.  
 ↓ subsequent pregnancies  
 ↑ interval between 1st and 2nd child  
 ↑ number of months women employed during child's 2nd year  
 ↓ months on welfare  
 ↑ father involvement in child care and support

Early parental life course (3-4 yrs following program completion):  
 ↓ additional pregnancies and live births  
 ↓ months on AFDC and Food Stamps  
 ↑ rates of living with father of child  
 ↑ rates of marriage

Later parental life course (13 yrs following program completion):  
 ↓ additional pregnancies and live births  
 ↑ spacing between 1st and 2nd child  
 ↓ months on AFDC and Food Stamps  
 ↓ arrests and convictions  
 ↓ days in jail



## What is a logic model?

A logic model provides a visual depiction of a program's "theory of change" - the way in which a set of services to a particular population are linked to expected outcomes of the program. The articulation of a program's theory of change can help program staff and families stay focused on the outcome goals rather than just focusing on program activities and services. A logic model is also a tool to assist program stakeholders in gathering data to facilitate effective program implementation and evaluation.

This model flows from left to right, as depicted by arrows, and shows how program goals are translated into home visit activities with families, which in turn, facilitate families to create change needed to attain program outcomes. The theory behind a logic model is a series of "If...then" statements. For example, If women who are smokers at entry into the program quit smoking, then they are more likely to have a full-term infant weighing greater than 2500 Grams.

## What are the major elements of the Nurse-Family Partnership logic model?

The major elements of the logic model include the program's goals, activities, and outcomes.

**Program Goals** are broad statements of expected outcomes for the problem(s) that the program is attempting to prevent or reduce. The program goals are color coded to illustrate how they correspond to program activities and outcomes.

**Activities** are interventions designed to facilitate change in families' attitude, knowledge and skills in order to help them attain the intended program results.

**Short-term Outcomes** are changes that occur by completion of the program. The specific outcomes delineated are those observed in the three randomized, controlled trials in Elmira, New York (1977), Memphis, Tennessee (1988) and Denver, Colorado (1994).

**Intermediate Outcomes** are changes that result over time from short-term outcomes and are measurable at a later timeframe, usually within 2-6 years following completion of the program. The specific outcomes delineated are those observed in the 4-year and 6-year follow-ups of families from the randomized, controlled trials in Elmira, Memphis and Denver.

**Long-term Outcomes** refer to changes that have a greater community impact and require a greater time to measure, often 10 or more years following program completion. The specific outcomes delineated are those observed in the 15-year follow-up of families who participated in the trial conducted in Elmira.

## Who does Nurse-Family Partnership serve?

Nurse-Family Partnership serves low-income, first-time mothers and their children, by providing nurse home visitation services beginning early in pregnancy and continuing through the first two years of the child's life. Women voluntarily enroll as early as possible in pregnancy, but no later than the 28th week of gestation.

The majority of participants are unmarried women with less than a high school education. The focus on women who have had no previous live births stems from the belief that individuals undergoing a major role change are more likely to seek information and support from others than are women who have already given birth. Moreover, the skills first-time mothers learn through the program, will help them provide better care for subsequent children, generating even broader salutary effects.

Other family members are invited and encouraged to participate if the mother wants them to be present.

## How does Nurse-Family Partnership work?

Central to the successful implementation of Nurse-Family Partnership is the establishment of a trusting relationship with the family. Registered Nurse Home Visitors work together with their clients, engaging them in activities associated with the three Nurse-Family Partnership goals during each home visit. These goals are:

- **Improve pregnancy outcomes;**
- **Improve child health and development; and**
- **Improve the economic self-sufficiency of the family.**

These goals are achieved by helping women engage in good preventive health practices, including obtaining thorough prenatal care from their healthcare providers, improving their diet, and reducing their use of cigarettes, alcohol and illegal substances. Child health and development is improved by helping parents provide responsible and competent care for their children. The economic self-sufficiency of the family is improved by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find work.

Nurse Home Visitors utilize a strength-based approach directed toward optimizing the family's sense of efficacy. They are guided in their work through detailed visit-by-visit guidelines that reflect the challenges parents are likely to confront during pregnancy and the first two years of the child's life. Within this framework, however, nurses use their professional judgment to address those areas where needs are greatest.

Guided by the above principals, and implemented with fidelity to the program model which has undergone extensive research over the past three decades, Nurse-Family Partnership is transforming lives through the power of relationships. For more information, please visit the Nurse-Family Partnership national website at: [www.nursefamilypartnership.org](http://www.nursefamilypartnership.org)

Nurse-Family Partnership's Theory of Change Logic Model was developed by Ruth O'Brien, Ph.D, RN, through a grant from the Harvard University Family Research Project - Home Visit Forum.