

## **“My Nurse Taught Me How to Have a Healthy Baby and Be a Good Mother:” Nurse Home Visiting with Pregnant Women 1888 to 2005**

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Catherine was a frightened, unmarried, pregnant young woman in 1991 when her Nurse Family Partnership (NFP) nurse first visited her home in Elmira, New York. She did well during pregnancy. She learned about her body and how to have a healthy baby. She talked with her nurse about her life and her dreams for the future. She learned how to take baby steps toward achieving her heart’s desires. Having earned a nursing degree, she now enjoys her nursing career and has gotten married. For 2 years she inspired other young women as a nurse home visitor in the same NFP program that was so important to her when faced with the life crisis of being young and pregnant too soon. Her adolescent son also benefited from his mother’s experience with the NFP. He presents himself as a well-adjusted young man who already expresses his life goals.

Rebecca is a young mother living in a shelter and will graduate from the NFP in 4 months when her daughter turns 2. After spending more than 2 years in the program, she formed a very strong bond with Carol, her NFP nurse. At a visit several months before the baby’s second birthday when Carol mentioned that they would be saying good-by soon, Rebecca said, “Don’t tell me that, you can still teach me things” [1]. Like thousands of women since the late 1800s, Catherine and Rebecca have benefited from nurse home visits during pregnancy, in the postpartum period, and in the early years of parenting.

### **NURSE HOME VISITING 1888 TO 1930**

Nurse home visiting with pregnant women has its origins in the late nineteenth century when neither physicians nor midwives scheduled regular prenatal visits. Regular prenatal visits first occurred when visiting nurses in Philadelphia

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started making biweekly home visits with pregnant women. The impetus was the discovery of a very ill and unsupervised boy at home by a nurse from the Visiting Nurses Association (VNA). His term pregnant mother was an in-patient in Preston Maternity Hospital, and his father worked long hours away from home to support the family. Medical efforts to help him were unsuccessful, and he died of his illness [2]. The problem identified by the VNA nurses was that Preston Maternity Hospital, in an effort prevent puerperal fever, hospitalized women during the last month of pregnancy in an effort to improve their nutrition and eliminate infection. After delivery, they kept new mothers in the hospital for the first month postpartum, thus placing other children at similar risk.

The Philadelphia VNA's solution was to institute a nurse home visiting program for pregnant women to improve health throughout pregnancy to decrease these extended hospital stays. Nurse visits were the first periodic health care provided to women during pregnancy, and within a few years, prenatal visits comprised a large percentage of the VNA's workload [2]. In 1901, the second prenatal visiting nurse service began at the Instructive District Nursing Association of Boston. Following the success of these services, nurses at VNAs throughout the country and at nurse-managed organizations, such as Henry Street Settlement and Maternity Center Association in New York, visited pregnant women and made postpartum visits. The content of these visits modeled what later became routine prenatal care.

Visiting nurses provided education with the intention of improving birth outcome and parenting. Once in the home, nurses were able to assess women for risks of eclamptic seizures and other pregnancy complications. When women at risk were identified, nurses made referrals for physician care to protect maternal and fetal outcome. Postpartum care provided support, maintained a clean environment, and followed mother and baby in an effort to identify risk, refer for early care, and educate mothers about infant feeding and child care (Fig. 1) [2].

Beginning in the 1850s, the relationship between proteinuria, edema, hyperreflexia, and impending eclamptic seizures was known. By 1900, hypertension had been added to the list, although it was not until the second decade of the twentieth century that nurses began to carry portable blood pressure cuffs into homes. Before that, nurses made sure that women at risk were seen in a clinic where stationary blood pressure equipment was available. The National Association of Public Health Nurses informed members through their journal about the work of prenatal services in member organizations [2]. In so doing, the journal helped to refine and spread this service, so that by 1916 prenatal and maternity care comprised between 18% to 24% of the visiting nurse caseload in two New York City agencies [3]. The Metropolitan Life Insurance Company felt that this care was so important to its members, that between 1916 and 1921 it reimbursed nursing agencies for these home visits. Between 1921 and 1929, the Shepard-Towner Maternity and Infancy Act funded almost 3000 visiting nurse prenatal and maternity services and over 3 million nurse home visits across the country [2-4].



**Fig. 1.** Nurse with baby. (From the archives of the National Nurse Family Partnership; with permission.)

During prenatal home visits, nurses assessed for danger signs and educated women about headache, visual changes, edema, proteinuria, and epigastric pain. In their biweekly visits, nurses also educated women about diet, exercise, rest, preparation for delivery, infant feeding, and infant care (Fig. 2). As portable less expensive blood pressure cuffs became available, nurses began to take blood pressures at every visit.

Home-based prenatal care delivered by nurses had dual objectives. First, prenatal visitation was part of a national campaign to reduce high rates of maternal mortality. In 1900 in the United States, the rate of maternal mortality was 85 maternal deaths per 10,000 live births, and by 1930 it had only decreased to 67 maternal deaths per 10,000 live births. These rates were higher than those in



**Fig. 2.** Philadelphia Visiting Nurse doing newborn nutrition at home. (From the Barbara Bates Center for the Study of Nursing History, University of Pennsylvania School of Nursing; with permission.)

England and Wales, which had a rate of 48 maternal deaths per 10,000 live births in 1900 and 44 maternal deaths per 10,000 live births in 1930. Rates in Sweden and the Netherlands were even better, with a rate of 23 maternal deaths per 10,000 live births in 1900 and 34 maternal deaths per 10,000 live births in 1930 (Table 1) [5].

Second, the educational component of home visits was designed to Americanize the large numbers of immigrant women who arrived in the United States between 1900 and 1930 to American ways of homemaking and child care [6].

In 1920, Bertha Irons, RN, chief of field work at Boston School of Public Health Nursing, discussed prenatal nursing visits with immigrant women in the *Public Health Nurse*. Cognizant of the cultural and class differences between the nurse visitor and pregnant woman, Irons cautioned that the “[i]nitial visit is the most important one, for upon it depends the nurse’s welcome for future visits and consequently her opportunity for helpfulness... Having received the patient’s permission for entering, let the visit proceed as a friendly call upon an acquaintance... With a few guiding questions the patient will usually talk freely of her present pregnancy... [7] This visit will afford an opportunity for observing the housing conditions and learning the economic situation of the family... [The nurse] is a comfort to the lonely patient who has no other woman to talk to...” [7] Mary Beard, RN [8,9], suggested that education on prenatal visits include discussions of rest and activity, exercise, diet, hygiene, hydration, preparation for childbirth, contents of the layette, signs and symptoms of labor, and what to expect at birth.

Nurses also provided written materials to supplement their teaching, frequently giving Mrs. Max West’s booklet, *Prenatal Care*, published by the Federal Children’s Bureau in 1913 [7]. Both Irons and Beard discussed the importance of assessing a woman for complications of pregnancy by checking urine for protein, and the woman for edema, presence of headaches or visual changes. They also advised checking the condition of the mother’s nipples, her gastrointestinal status, the nature of her vaginal discharge, and her work status. Over time, visiting nurses added assessment of blood pressure, fetal heart rate, and a woman’s emotional status.

Physician-managed prenatal care, with assessment and education at regular intervals throughout pregnancy, did not become routine medical practice for

**Table 1**  
Comparison of early twentieth century rates of maternal deaths

Country	Maternal deaths per 1000 live births 1900	Maternal deaths per 1000 live births 1930
United States	85	67
England and Wales	48	44
Sweden and the Netherlands	23	34

Data from: Loudon I. *Death in childbirth: an international study of maternal mortality 1800–1950*. Oxford (UK): Clarendon Press; 1992.

another 20 years, during which time nurses across the country were routinely providing, refining, and expanding their biweekly prenatal care. The first discussion of routine prenatal visits in an obstetric text occurred in 1923 and was a direct result of the experience of visiting nurses. At the urging of Mrs. Lowell Putnam, board chair of the Boston Instructive District Nursing Association, J. Whitridge Williams, MD, finally added a recommendation of routine prenatal office visits to his obstetrics text, *Obstetrics. A Textbook for the Use of Students and Practitioners*, 5th edition [10]. Thus, early twentieth century prenatal nurse-home visiting was a model and direct stimulus for physician-provided prenatal care. It can be argued that it was also a historical precursor of the NFP.

## **NURSE HOME VISITING 1978 TO PRESENT: THE NURSE FAMILY PARTNERSHIP**

### **Randomized controlled trials**

In 1977, Olds and colleagues implemented a randomized, controlled trial of a theory-driven nurse home visitation program for 400 pregnant women and new mothers in Elmira, New York [11,12]. Randomized, controlled trials also were conducted in Memphis, Tennessee, beginning in 1987 (N = 1135) [13,14], and Denver, beginning in 1994 (N = 735) [15,16]. Families in the Elmira trial were predominately white; those in the Memphis trial were predominately African American, and the Denver trial included families from diverse backgrounds including Mexican, white non-Mexican, European American, and African American. The Elmira and Memphis trials tested the efficacy of the nurse home visiting model. In Denver, the outcomes of women and children visited by either nurses or paraprofessionals using this model of visitation were compared.

All three trials enrolled women who were less than 26 weeks into their first pregnancy and had at least one of the following risk factors: younger than 19 years old, single, or low socioeconomic status. They were recruited from health department prenatal clinics, private obstetric offices, Planned Parenthood, public schools, and other community health and social service agencies. Visitation schedules evolved over the three trials, and by the last one in Denver, antepartum intervention began with weekly visits during the first month followed by biweekly home visits for the rest of pregnancy. Post partum, the nurse visited weekly during the first 6 weeks and then resumed by biweekly visits until 20 months. Between 20 and 24 months the nurse visited monthly. The following discussion looks only at outcomes in families visited by nurses, because families receiving the paraprofessional intervention had only one statistically significant outcome; mother child interaction was more responsive than in the control group [15].

The 15-year long-term follow-up for the Elmira participants demonstrated many long-lasting, significant, and positive outcomes of the intervention for the women and their children. Compared with the control groups, it was found that in families who received the 2.5-year visitation, there was:

- A decrease in contacts with the criminal justice system
- 69% fewer arrests among the women
- 81% reduction in convictions of the adolescent children
- 56% reduction in emergency room visits
- 32% reduction in subsequent pregnancies
- 83% increase in labor force participation among the mothers by the child's fourth birthday [11,17–19]

Further, a RAND corporation study showed a \$4 return for every \$1 invested in the intervention [20], and a cost-benefit analysis conducted at the request of the Washington state legislature projected a \$17,180 lifetime cost savings for every child born to a mother who received 2.5 years of home visitation by a NFP nurse [21].

## NATIONAL REPLICATION

As a result of excellent outcomes, the research team decided to replicate the intervention on a nationwide basis in a program now named the Nurse Family Partnership. As of May 2005, the program has been replicated in 20 states at 250 program sites that serve over 13,000 families a year. Program sites include local social service agencies; state, county, and city health departments; nurse-managed health centers; and visiting nurse associations. Each site creates teams that include one half-time supervisor for four full-time nurses who each carry a caseload of 25 families.

The intervention follows a standardized 2.5-year curriculum, and, like early twentieth century home-based prenatal nursing, the NFP is designed to improve pregnancy outcomes and child health and development. Additionally, Olds and colleagues realized that to achieve multi-generational changes in family health and social functioning, the program also would have to improve the skills and economic self-sufficiency of these vulnerable young women. Often pregnant by accident, they tend to have poor communication and life planning skills, and move in and out of relationships without forming lasting bonds. To achieve these goals, Olds grounded the NFP program in Bronfenbrenner's theory of human ecology, Bowlby's human attachment theory, and Bandura's theory of self-efficacy, because each provides insight into specific needs of this target population [22].

The theory of human ecology posits that child development is influenced by the characteristics and interactions of a family's social networks, neighborhood, and community. The theory of self-efficacy argues that individuals choose actions they are capable of and that they believe will achieve a desired result. Attachment theory is perhaps the best known and holds that, because of their biology, infants are predisposed to seek human closeness during times of stress. Success at forming a caring attachment with a primary caregiver results in a child's development of trust, empathy, and his or her own ability to parent later in life [22].

Based on these theories the NFP curriculum is designed to provide a therapeutic relationship between nurse and client in which a young mother learns effective

decision-making, parenting, and problem-solving skills. She also learns to trust her expertise about herself and her children. In effect, the nurse mothers each young woman she works with, and in this role, the nurse models skills that the client incorporates into her own parenting and into her interactions with others in her environment, beginning with obstetric and pediatric providers. Most young mothers in this program have never had the kind of supportive relationship they have with their nurse. This program is client-focused. The importance of meeting a mother's goals is primary. It is the mother's agenda and not the nurse's that drives what happens in a home visit. In addition, the nurse works with a mother's personal support system to assist her as she completes her education and moves into the world of work. Building on a mother's strengths, the nurse helps each woman develop her sense of self-efficacy. Long after the program ends, the nurse's influence has a lasting impact on a family's health and welfare for generations to come.

During the course of the 2.5-year visitation, a nurse provides a mother with education across six domains: personal health; environmental health, maternal role, life course development, family and friends support networks, and health and human services. A young woman is educated about pregnancy, growth and development of the fetus and newborn, and ways to create a safe and stimulating environment for her young child. Together with the nurse, a client identifies her social supports and discusses strategies for strengthening and using this system to help her parent while progressing toward education and work goals. The mother is the expert on her own life. Nurses do not tell her what to do, but rather they respect and encourage her to make her own decisions and to use newly learned problem-solving strategies to achieve her heart's desires.

Using the model of behavioral change developed by Prochaska and colleagues [23], NFP nurses assess a client's stage of change, readiness to work on developing new behaviors, goal setting, and progress toward permanent change. Nurses understand that behavioral change must be an internal process to be successful. Therefore, they concentrate on supporting a client in her process of change rather than forcing change to take place. Most importantly, nurses try very hard to make sure that action steps for change are realistic and doable, so that self-efficacy is experienced and the change process is reinforced.

In the precontemplation stage of behavioral change, a woman is not interested in changing behavior, because, although she is aware of a problem, she may be unaware or unconcerned of the negative consequences for herself or her child or lacks motivation to change. She blames others and wishes others would change so her life will improve. When a nurse assesses that a woman is in the precontemplation stage, she focuses interventions to increase self-insight and move the client into the second phase, contemplation.

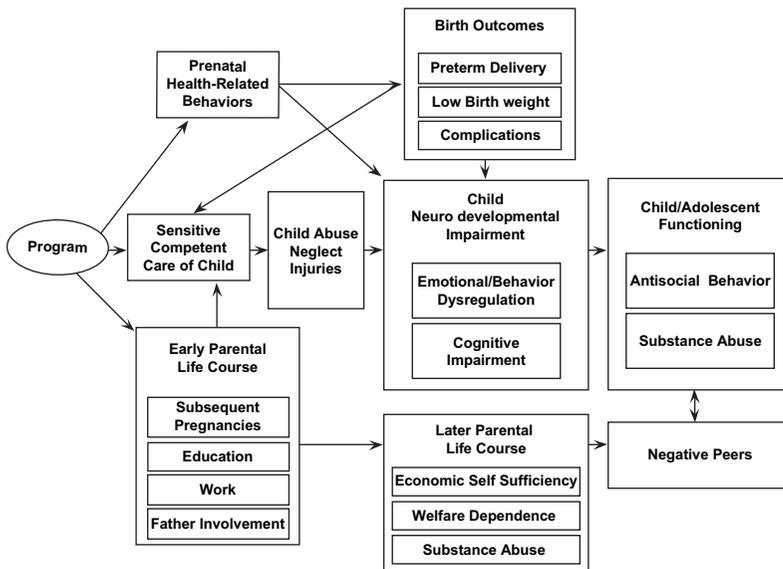
A woman may experience anxiety during the contemplation stage, because she has become aware that the problem is within and is ambivalent about taking the risk necessary for change. She tries to understand the causes and solutions but frequently falls into the yes but safety zone. As a nurse works with her

client in this stage, she helps the woman look at the benefits of changing and the drawbacks of staying the same. When the woman decides the latter outweighs the former, she moves into the preparation phase and becomes committed to taking action, focusing less on the problem and more on an action plan.

The preparation phase is critical. Adequate time must be spent planning for change; otherwise the client is set up for failure and will return to old behaviors. She then must recycle through the beginning stages once again. In fact, lapses and failure, depending on the type of change being made, are discussed with the woman and normalized to avoid discouragement. With each attempt to change behavior, however, learning takes place, and change becomes an easier process.

During the action phase, the woman commits her time and energy to adapting new more effective behaviors. Over time there will be small steps backward, but after 3 to 6 months, new behaviors will become more common, and the woman will enter the maintenance phase. During this phase, lapses become fewer, and new behavior becomes routine and integrated into the woman's sense of self. A lifestyle alteration has occurred, and the woman is now in the sixth or final stage, self-empowerment. She has achieved her goal, adopted a new self-image, and achieved a new sense of self-efficacy. She now is living a healthier lifestyle and has no desire to return to the problem behavior pattern.

Fig. 3 diagrams a theoretical model of prenatal, birth, and program influences on future maternal behavior and child health and development that the NFP



**Fig. 3.** Conceptual model of program influences on maternal and child development. (Reprinted from Olds D. Prenatal and infancy home visiting by nurses: from randomized trials to community replication. *Prevention Science* 2002;3(3):153–72; with permission.)

program is designed to influence. Nurses use interventions geared to facilitating prenatal and early parental and child life course behavioral change so that the potential for negative outcomes in pregnancy and child development is lessened. For instance, research has shown that prenatal exposure to tobacco, alcohol, and illegal drugs negatively affect the growth and development of the fetus, the potential for term birth, and increase the risk for neurobehavioral impairment of the child. Therefore, the program interventions place heavy emphasis on decreasing and eliminating use of these substances use during pregnancy.

Nurses in this home-based visitation program have a largely autonomous role providing education and case management for high-risk, low-income families living in complex environments. Therefore, fidelity to the model is important and is ensured as the program is replicated across the country in several ways. As nurses are hired into the program, they begin a standardized three-stage orientation and education program of more than 60 hours conducted by nurse educators from the national NFP. This curriculum is competency-based and prepares registered nurses to implement the NFP model of care.

The first stage has two steps, home study and group instruction. Just before attending a 3-day education session in Denver, nurses and supervisors complete a 20-hour self-study module. The home study module provides an introduction and foundation for understanding the theoretical basis of the program. In Denver, nurses and supervisors learn about the pregnancy intervention curriculum, and how to use the Visit-to-Visit program guidelines. They also learn about reflective practice, which incorporates supervision to help ensure fidelity to the program and to serve as a model for reflective communication and problem solving in work with clients.

Nurses have an hour of reflective supervision every week. The nurse brings client issues and concerns to the session for discussion so that she can return to a client with a fresh approach. The supervisor uses the sessions to assess how each nurse is doing and uses reflection to stimulate new ideas, approaches, and directions in the nurse's work. Reflective practice, which also includes case conferences and field supervision, provides a formal process of professional support and learning that enables nurses to develop the knowledge and competence necessary to deliver this complex model of care.

The second stage has two components, an NFP workshop and two Nursing Child Assessment (NCAST) training sessions. The 3-day NFP education workshop focuses on the infancy curriculum, how to use the Visit-to-Visit program guidelines, incorporating NCAST feeding and teaching assessments, Ages and Stages developmental assessments, and Partners in Parenting Education (PIPE) interventions. Either before or just after the second session, nurses and supervisors attend NCAST workshops and achieve proficiency in using NCAST feeding and teaching screening tools, which are used for assessing maternal child interaction from birth to 2 years.

PIPE is a curriculum designed to draw on the strengths of a parent to promote positive parenting skills and enhance the emotional connection between mother and baby. This program includes floor-time activities that help mothers

learn to communicate with and teach their babies. Nurses begin to introduce these activities during home visits between birth and 2 years.

Floor time is an important part of each home visit during which a nurse asks the mother to put a blanket on the floor so they both can sit with the baby along with a doll that each nurse brings to home visits. A nurse interacts with a doll so the baby does not give the nurse a reaction that he does not give to his mother. After creating relevance for a concept related to emotional connectedness or parenting, the nurse demonstrates communication or play with her doll and then asks the mother to try the activity with her baby.

In one lesson on mother/infant communication, the nurse first may hold her doll in her hands on its back so she is looking at the side of the doll's face. The nurse calls the doll's name and then slowly turns the doll's head to the sound of her voice. The nurse then smiles, turns her hands so the doll is facing her, and says something like, "Hello Sasha, did you hear me calling your name? Oh, I see you want to talk today. You are such a big boy. I see you need a rest. You have turned away (the nurse turns the doll's head slightly). I will wait until you are ready to talk some more." The nurse then asks the mother to hold her baby in the same way and call his name. The pleasure a new mother gets when her baby alerts to her voice and turns to see her is wonderful to see, and it stimulates further mother/child interaction. It also opens a discussion of what babies hear and see, the importance of infant stimulation, and the mother's central role as her baby's first teacher. Nurses use the NCAST assessment tools and Ages and Stages developmental assessment to plan targeted interventions with PIPE and other program materials designed to improve maternal child interactions, parenting skills, and child development.

The third stage also has two components: a workshop that focuses on the toddler curriculum and instruction on how to use the Visit-to-Visit guidelines, and the introduction of a unique curriculum Smart Choices. During the toddler period, nurses often focus on the mother's goals for the future as she prepares for termination at the baby's second birthday. Smart Choices was designed and integrated into the NFP curriculum to provide an additional approach to teaching problem-solving skills. These interactive lessons are based on student competencies developed in the academic field to prepare young adults to achieve life course goals for work or school success. The curriculum has 30 lessons, which are in the narrative form of a story and discussion designed to build communication, thinking, organizational, technology, and workforce skills. It is also designed to strengthen the ability to use community resources and build personal support networks. Nurses are encouraged to use Smart Choices with clients who need to work on these specific skills.

Nationally, the NFP collects data from replication sites through a Web-based Clinical Information System that monitors the work and client outcomes of each program. Nurses collect data that are entered on each home visit and on maternal smoking patterns, pregnancy outcomes, timing of subsequent pregnancies, the child's growth and development, childhood injuries, reported child abuse and neglect, and the mother's status in terms of education, work,

and use of welfare. These data are analyzed and returned to local NFP sites to provide them with evidence of their progress toward program goals and outcome, and to inform individual nurse practice trends and for quality improvement measures. In this way, outcomes at each site are measured against national benchmarks, and sites use this information to improve the service they provide. Data also are used with national and state legislators to lobby for funding, and with other funding sources to obtain required match. Several states, including Pennsylvania, Colorado, Louisiana, and Oklahoma, have committed to a statewide initiative, developing and funding sites statewide.

Continuing education and clinical consultation are on-going parts of the program and are designed by nurse clinical consultants from the national NFP office or employed by a state initiative. This can take the form of regular conference calls with supervisors, with teams at several sites, and state or regional conferences with guest speakers and workshops. Nurses are also responsible for their own growth as home visitors. The NFP has developed a competency-based assessment program. Through the supervisory process, nurses set annual competency-based goals, steps for monitoring goal attainment, and with the supervisor, engage in periodic assessment of their progress.

## SUMMARY

Nurse home visiting with pregnant women and new mothers in the early decades of the twentieth century was designed to improve birth and newborn outcomes, hasten Americanization of immigrant mothers, and improve their parenting skills (Fig. 4). Today the NFP home visitation program improves newborn and child outcomes by positively influencing maternal role attainment and significantly decreasing maternal smoking and other substance abuse, child abuse and neglect, and children's emergency room visits. It also improves life possibilities for vulnerable young women by decreasing the interval and frequency of subsequent pregnancies and reduces dependence on welfare by increasing workforce participation. The program's effects do not end with the intervention. Long term follow-up in randomized controlled clinical trials has shown that in adolescence children whose mothers were participants in the NFP intervention had fewer arrests and convictions, less drug use, and fewer sexual partners.

Nurse-home visiting has always been a practice with a higher level of independent nursing assessment and decision-making. Over time, this nursing practice has been implemented by independent nursing organizations such as VNAs, nurse-run settlement houses, and nurse-managed centers. Today the NFP outcomes show that this program of home visitation, which is grounded in theories of child development, attachment, and behavioral change, has the potential for reducing the damaging and widespread problems experienced by low-income, vulnerable women and their children. As a result, four states have committed to initiatives funding statewide replication of this program, and together with 19 other states without statewide initiatives, have developed replication sites in 250 counties nationwide. Today, Olds and colleagues in national and regional



**Fig. 4.** Philadelphia Visiting Nurse at a postpartum visit. (From the Barbara Bates Center for the Study of Nursing History, University of Pennsylvania School of Nursing; with permission.)

offices, and NFP nurse home visitors around the country, work toward the goal of making this program available to every vulnerable family in the United States. Nurses, by maintaining fidelity to the NFP model, ensure that its impact continues to change the life course trajectory for multiple generations of families.

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### References

- [1] Enkiji MS. Innovative program offers guidance, hope: the Nurse Family Partnership pairs nurses with mothers-to-be. It has been described as one of the state's "best kept secrets." *Sacramento Bee* May 13, 2005. p. 1.
- [2] Dawley K. Ideology and self-interest: nursing, medicine, and the elimination of the midwife. *Nurs Hist Rev* 2001;9:99–126.
- [3] Halsey OS. Health insurance and public health nursing. *Public Health Nurse Quarterly* 1916;8(3):58–66.
- [4] Frankel L, Dublin L. Visiting nurse and life insurance: a statistical summary of results for eight years. Reprinted in the *Quarterly Publications of the American Statistical Association*. June 1918.
- [5] Loudon I. *Death in childbirth: an international study of maternal care and maternal mortality 1800–1950*. Oxford (England): Clarendon Press; 1992.
- [6] Buhler-Wilkerson K. *No place like home: a history of nursing and home care in the United States*. Baltimore (MD): The Johns Hopkins University Press; 2001.
- [7] Irons B. Prenatal nursing. *Public Health Nurs* 1920;12(6):594–601.
- [8] Beard M. Prenatal Nursing. *Public Health Nurse Quarterly* 1923;15(8):415.
- [9] Beard M. Prenatal nursing. *Public Health Nurse Quarterly* 1915;7:313–24.

- [10] Longo LD, Thomsen CM. Prenatal care and its evolution in America. Presented at the Second Motherhood Symposium of the Women's Studies Research Center, University of Wisconsin. Madison, Wisconsin, April 9–10, 1981.
- [11] Olds DL, Henderson CR, Cole R, et al. Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial. *JAMA* 1998;280(14):1238–44.
- [12] Eckenrode J, Ganzel B, Henderson CR, et al. Preventing child abuse and neglect with a program of nurse home visitation: the limiting effects of domestic violence. *JAMA* 2000;282(11):1385–91.
- [13] Kitzman H, Olds DL, Sidora K, et al. Enduring effects of nurse home visitation on maternal course: a 3-year follow-up of a randomized trial. *JAMA* 2000;28(315):1983–9.
- [14] Olds DL, Kitzman H, Cole R, et al. Effects of nurse home visiting on maternal life course and child development: age 6 follow-up results of a randomized trial. *Pediatrics* 2004;114(6):1550–9.
- [15] Olds DL, Robinson J, O'Brian R, et al. Home visiting by paraprofessionals and by nurses: a randomized, controlled trial. *Pediatrics* 2002;110(3):486–96.
- [16] Olds DL, Robinson J, Pettitt LM, et al. Effects of home visits by paraprofessionals and by nurses: age 4 follow-up results of a randomized trial. *Pediatrics* 2004;114(6):1560–8.
- [17] Yeager C. Testimony before House Committee on Appropriations Subcommittee on Departments of Labor Health & Human Services, Education and Related Agencies April 14, 2005.
- [18] National Nurse Family Partnership. Fact Sheet. Available at: <http://www.nursefamilypartnership.org> homepage and research evidence. Accessed October 10, 2005.
- [19] Olds DL, Henderson CR Jr, Chamberlin R, et al. Preventing child abuse and neglect: fifteen-year follow-up of a randomized trial. *JAMA* 1997;278(8):637–43.
- [20] Karoly LA, Greenwood PW, Everingham SS, et al. Investing in our children: what we know and don't know about the costs and benefits of early childhood interventions. Santa Monica (CA): The RAND Corporation; 1998.
- [21] Aos S, Lieb R, Mayfield J, et al. Benefits and costs of prevention and early intervention programs for youth, Olympia (WA): Washington State Institute for Public Policy; 2004.
- [22] Olds D. Prenatal and infancy home visiting by nurses: from randomized trials to community replication. *Prev Sci* 2002;3(3):153–72.
- [23] Prochaska JO, Norcross JC, DiClemente CC. Changing for good. New York: Avon Books; 1994.

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