Originally submitted as email to Mari Cantwell, Deputy Director, Department of Health Care Services

## Mari,

I am writing to provide you information about Nurse-Family Partnership for consideration in the 1115 Waiver planning process, and to inquire about the process for joining one of the upcoming workgroups.

Nurse-Family Partnership (NFP) is an evidence-based health program that transforms the lives of vulnerable first-time mothers living in poverty by partnering them with a registered nurse. NFP enrolls Medicaid eligible first-time moms during the prenatal period, usually before 16-weeks gestation, and we work with them until their child is two-years old via nurse-based home visiting. Three separate randomized controlled trials, more than 35 years of research data, and replication of the program in more than 500 communities in 43 States have continuously proven NFP's positive impact. Among California NFP enrollees, 92% of babies were born full term and 92% were born at a healthy weight; 91% of children received all recommended immunizations by 24 months; and 92% of mothers initiated breastfeeding. An independent evaluation by a health economist concluded every dollar spent on NFP in California can yield \$4.20 in return, with 55% of the cost savings to Medicaid totaling \$9,572 per family served at child age 18 and \$4,721 per family at child age 5. With approximately 100,000 California babies born annually that could benefit from NFP, there is considerable need and considerable opportunity to maximize outcomes and savings. NFP is also the only prenatal or early childhood program to meet The Coalition for Evidence-Based Policy "Top Tier" evidence standard used by the U.S. Congress and Executive Branch to distinguish research-proven programs.

Despite NFP's proven outcomes, savings to Medicaid, and considerable interest among Managed Care Organizations (MCOs), hospitals, and medical providers to fund NFP, there remains challenges for them to fund NFP under current Medi-Cal guidelines. At present, the medical community is only able to use Medi-Cal to support specific components of the program and not the entire program as a preventive service. We would like to propose inclusion of NFP in the California 1115 Waiver so the medical community can receive Medi-Cal support and so the State and local partners can share in the costsavings of NFP and benefit from the demonstrated performance improvement outcomes of NFP. Support at the federal level for a Waiver that includes NFP is highly likely given that NFP is part of the 1115 Waiver in New York and Texas.

I was fortunate to be in attendance at the September 11, 2014 Stakeholder Advisory Committee meeting and have been able to review written materials for the 1115 Waiver proposal. I believe NFP can help improve quality outcomes and help to control the cost of care. Specifically, NFP provides opportunity for the State to benefit from NFP's return on investment from state and federal Medicaid savings per family. NFP can also help with incentive payments to programs due to our care coordination, case management, and proven reduction in readmission and ED visits. Further, an approach that includes hospital-based implementation would add further success to the Delivery System Reform Incentive Payment (DSRIP) program due to our outcomes-oriented philosophy working with complex high-risk patients and our demonstrated advancement of Triple Aim goals.

I have attached informational materials that provide additional data and evidence of how NFP can help advance the goals of the 1115 Waiver. Since attending the September 11, 2014 Stakeholder Advisory Meeting we have engaged several of our healthcare partners around a possible public/private partnership that would braid 1115 Waiver funding with other State and local dollars to support NFP. Our partner conversations have included several Medi-Cal MCOs, a private national provider organization, and several hospitals. I would be happy to arrange a time to speak with you and your colleagues further about NFP and the discussions underway with our partner organizations.

Thank you in advance for your consideration of NFP.

Regards, -Christopher S. Krawczyk, Ph.D.

Christopher S. Krawczyk, Ph.D | California State Director Nurse-Family Partnership | National Service Office Direct: 303.864.4336 | Toll free: 866.864.5226 Mobile: 916.955.0276 | chris.krawczyk@nursefamilypartnership.org Links: Website | Facebook | Twitter

Celebrating 10 Years of Replicating Excellence

*Our Mission: Empower first-time mothers living in poverty to successfully change their lives and the lives of their children through evidence-based nurse home visiting.* 

# Nurse-Family Partnership: Outcomes, Costs and Return on Investment in California



A new report<sup>i</sup> on the Nurse-Family Partnership<sup>®</sup> (NFP) found that NFP offers significant benefits to the families it serves and significant cost savings to society and government funders. Prepared by Dr. Ted Miller of the Pacific Institute for Research and Evaluation, the report is the most comprehensive analysis to date of NFP's costs, outcomes and return on investment.

# NFP's Cost Savings and Return on Investment

NFP Cost per Family Served	\$ 12,075
Savings to State and Local Government at age 18	\$ 10,457
Savings to Fed Government at age 18	\$ 8,335
Total Government Savings at age 18	\$ 18,792
Cumulative Savings to Medicaid at age 18	\$ 9,752
Total Societal Savings*	\$ 50,558

\*NFP's benefits to society are estimated to be \$50,558, taking less tangible savings (like potential gains in work, wages and quality of life) into account



along with resource cost savings (cost offsets to government, insurers, and out of pocket payments by families).

# At an average cost per family of \$12,075 in California, Miller's model predicts that by a child's $18^{\circ}$ birthday:

- State and federal cost savings due to NFP will average \$18,792 per family served or 1.6 times the cost of the program.
- Taking less tangible savings (like potential gains in work, wages and quality of life) into account along with resource cost savings (cost offsets to government, insurers, and out-of-pocket payments by families), the benefits to society of NFP are estimated to be \$50,558, which represent a \$4.20 return on investment for every dollar invested in Nurse-Family Partnership.

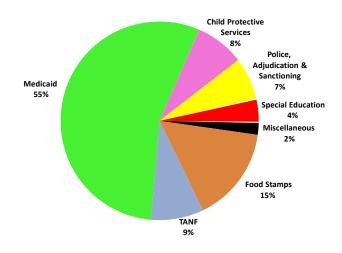


Figure 1. Distribution of Federal, State and Local Government Cost Savings per Family Served by NFP Nationwide (Present Value @ a 3% Discount Rate)

# **OUTCOMES**

Based on a review of evidence from 30 NFP evaluation studies, including randomized controlled trials, quasiexperimental studies and large-scale replication data, Miller's analysis predicts that when NFP is brought to scale, it can achieve the following outcomes in California:

- 23% reduction in smoking during pregnancy
- 26% reduction in pregnancy-induced hypertension
- 18% reduction in first preterm births (<37 weeks)
- 56% reduction in infant mortality (3.2 fewer infant deaths per 1,000 families served)
- 29% reduction in closely-spaced second births (within 2 years postpartum)
- 22% reduction in very closely-spaced second births (within 15 months postpartum)
- 27.5 fewer subsequent preterm births per 1,000 families served
- 12% increase in moms who attempt to breastfeed
- 35% reduction in emergency department use related to childhood injuries (ages 0-2)
- 29% reduction in child maltreatment (through age 15)
- 37% reduction in language delay
- 43% reduction in youth crimes and arrests (ages 11-17)
- 50% reduction in alcohol, tobacco & marijuana use (ages 12-15)
- 21% increase in full immunization status (ages 0-2)
- 7% reduction in TANF payments (through 9 years postpartum)
- 8% reduction in Food Stamp Payments (through 10 years postpartum)
- 7% reduction in person-months of Medicaid coverage (through 15 years post-partum)
- 11% reduction in costs if on Medicaid through age 18
- Subsidized child care caseload reduced by 3.3 children per 1,000 families served

### Dr. Miller's model predicts that on average, enrolling 1,000 low income families in NFP will prevent:

- 20 first preterm births and 64 subsequent preterm births to young mothers
- 56 cases of preeclampsia
- 3.2 infant deaths
- 45 cases of child maltreatment
- 128 child injuries treated in emergency departments
- 184 instances of youth substance abuse
- 161 youth arrests



<sup>&</sup>lt;sup>1</sup> Ted Miller, Ph.D., Pacific Institute for Research and Evaluation, *Nurse-Family Partnership Home Visitation: Costs, Outcome, and Return on Investment*, April 30, 2013 and associated Return on Investment Calculator dated 5/5/2014. The national report is accompanied by a state-specific return on investment calculator that modifies national estimates to project state-specific outcomes and associated return on investment. The calculator is updated periodically to reflect major research updates.



August 2014

# Nurse-Family Partnership® Home Visits

The Nurse-Family Partnership® (NFP) model combines case management and preventive services, including nursing assessments, screenings, incidental direct services, and health education and guidance within the scope of practice of a registered nurse. Many of these services are consistent with recognized standards of care and would complement and supplement services provided in office-based settings.

While a few components of an NFP home visit would never be covered by Medicaid (e.g. guidance regarding education, employment), the majority of nursing assessments, screenings and other preventive and health education services could be considered a medical assistance benefit when such services are provided by a qualified Medicaid provider within his or her scope of practice under state law. In addition to targeted case management services, NFP nurses use their nursing skills to provide health, psychosocial, environmental, mental health and substance use risk screening during pregnancy using standardized tools. During the postpartum period, NFP nurses assess the health status of the mother and the child, and later, assess the infant's immunization status and growth and development milestones. NFP nurses are required to use the Edinburgh or PHQ-9 to screen for maternal depression. They also use DANCE to score the quality of mother/child interaction, complete a HOME Inventory to assess the quality of home environment related to developmental and learning opportunities, and complete the ASQ and ASQ-SE to screen child development.

Based on assessments and continuous reassessments completed during home visits, the NFP nurse develops and implements a care plan that is client-centered and reflects the needs of the client as well as the client's goals for herself. Referrals are made to needed medical, social, educational and other services as necessary. In turn, the nurse advocates for the client—and cultivates the client's self-efficacy to advocate for herself—to ensure the mother is able to access the services in the care plan. Care plans are updated as needed and coordinated with all involved care providers, including the client's health care provider, to ensure coordination and continuity of care. During home visits, the nurse ascertains if the client has been able to meet the care plan goals, if referrals have been followed-up, if referral agencies are providing services, and if the client is satisfied with the services she received. As a result of these assessments, the nurse and client identify what new activities or goals need to be added to the care plan, and what new referrals need to be made to ensure that the client's needs are being adequately addressed.

In addition to these typical nursing assessments and case management activities, NFP nurses follow extensive Visit-to-Visit Guidelines for pregnancy, infancy and toddler home visits produced by the NFP National Service Office (NSO). These guidelines provide important structures and resources to enable the nurse to adapt the program to each family's needs while simultaneously ensuring that the program is delivered consistently and effectively with adherence to the model's core theoretical framework. Content for each visit focuses on the six domains of individual and family functioning. A brief description of each content domain follows:

• **Personal health** (assessment and guidance and counseling on the woman's health maintenance practices, including but not limited to nutrition, exercise, tobacco use, alcohol use, cocaine use, non-prescribed medication use, other substance use, and mental health , and education regarding the stages pregnancy, preparing for the birth of the baby, health and

development of the baby, and health needs of the mother following the delivery of the baby, maintenance of prenatal and postpartum visits)

• **Environmental health** (assessment and guidance and counseling related to the home, work, school and neighborhood conditions that could impact the mental and physical health of the mother and her child including but not limited to exposure to lead, allergens, or unsafe living conditions like gangs, substance abuse and or domestic or intimate partner violence, crib safety, use of car seats, etc.)

• **Maternal role** (assessment and guidance and counseling on acceptance of the maternal role and acquisition of the knowledge and skills to promote the health and development of her infant including mother/infant attachment and bonding, breastfeeding, parenting skills, and mechanisms to cope with stress. Additionally, nurses provide anticipatory guidance related to normal child growth and development.)

• **Life Course Development** (assessment and guidance and counseling on a woman's goals related to childbirth(family) planning, completion of education and finding employment)

• Health and Human Services (assessment and guidance and counseling to ensure linkage of mother and child to necessary resources and services to meet the health, educational and social needs of the mother and her child including maintenance of health insurance coverage and completion of required prenatal, postpartum and well child visits as well as visits for required immunizations and lead screenings)

• Friends and Family (assessment and guidance and counseling to help a woman deal with relationship issues and enhance support for her own education and employment goals and management of child care).

The emphasis given to each content domain in a given visit varies with the visit objectives and with the needs of the client. Moreover, the emphasis shifts over time as the mother transitions from the pregnancy to postpartum period and as the relationship between the mother and her child evolves. Each visit is divided into distinct segments including:

- <u>Issues and Concerns</u> that have emerged for the client since the last visit;
- <u>Review and Report</u> of progress made on goals and activities since last visit;
- <u>Assessment of current physical, mental and social status</u> and need for referral;
- <u>Planned Guidance</u> including screening, motivational interviewing, facilitated discussions, counseling and homework activities for both mother and father, if he is involved;
- <u>Summary</u> of what has been accomplished during the visit;
- <u>Goal setting</u> for both mother and nurse to be completed before next visit; and
- <u>Negotiation of</u> next visit date.

The NSO provides detailed Visit-to-Visit Guidelines for each of the projected pregnancy, infancy and toddler visits. In utilizing these guidelines, nurses may provide the following preventive health guidance and services and recommend referral to specialty services, depending on the needs of the mother or child:

- monitoring for high blood pressure or other complications of pregnancy;
- diet and nutritional education and/or coordination of care;
- stress management;
- STD prevention education and/or coordination of care;

- tobacco use screening and cessation education and/or coordination of care;
- alcohol and other substance misuse screening and counseling and/or coordination of care;
- depression screening;
- domestic and intimate partner violence screening and education and/or coordination of care;
- breastfeeding support and education;
- contraception education and/or coordination of care;
- monitoring height, weight, head circumference (child growth and development);
- child developmental screening;
- inter-conception care and education/or coordination of care;
- guidance and education to maintain Medicaid /insurance coverage;
- guidance and education with regard to well woman visits to obtain recommended preventive services;
- guidance and education to complete immunization;
- verbal lead screening and lead poisoning education;
- guidance and education to complete well child visits;
- education on appropriate use of primary care versus emergency room care; and
- education on environmental safety for prevention of lead and other toxic exposures, as well as physical hazards.

The NFP client/family centered Visit-to-Visit Guidelines are adaptable to the specific circumstances of the women and children served. Nurse home visitors use their professional knowledge and skills in applying the NFP Visit-to-Visit Guidelines, individualizing them to the strengths and challenges of each family.

All NFP home visitors are registered nurses with preferred experience in maternal/child health, pediatrics and/or community health nursing. A randomized controlled study published in 2004 compared the impact of home visits by nurses with home visits by paraprofessionals and used a third control group as well. The study found that nurse-visited women reported greater intervals between the births of their first and second children, and less domestic violence compared with the control group. These differences were not found to be statistically significant between the paraprofessional-visited women and control subjects.

NFP is a preventive, nurse home visiting program model that focuses on early intervention. NFP's focus on early intervention is why the model requires entry by the 28<sup>th</sup> week of pregnancy. Since NFP nurses see women and their children in their homes on a regular basis, they have timely access to information regarding the immediate health, social, educational and other needs and can encourage and assist the mother in seeking care she may need for herself or for her child.

The power of NFP's innovative program is that it uses the nursing process and nursing assessment, reflective practice and motivational interviewing skills to combine preventive services, health education, guidance, education, care coordination, and case management through regular home visits to first-time mothers and their children. The model successfully blends nursing assessments; preventive services, health education, guidance, education, care coordination; and case management in a proven, unparalleled model that has been shown to improve care, improve health and reduce Medicaid costs, , in addition to savings that accrue to other publicly- funded programs.





Nurse-Family Partnership® (NFP) is an evidence-based, community health program for first-time, low-income moms and their babies. NFP is a best-in-class prevention model that stands on the weight and power of over 35 years of scientific research demonstrating improved health and social outcomes for this high-risk, high-cost population. Through ongoing home visits from registered nurses, NFP clients receive intensive support to achieve a healthy pregnancy, provide responsible and competent care for their children, and become more economically self-sufficient. From pregnancy until the child turns 2 years old, NFP nurse home visitors form a much-needed, trusting relationship with their clients, instilling confidence and empowering mothers to achieve a better life for their children–and themselves.

# NFP CAN HELP HOSPITALS AND HEALTH SYSTEMS ACHIEVE THE "TRIPLE AIM"

There is a growing realization that successful hospitals and health systems of the future will be those that can simultaneously deliver excellent quality of care, at optimized costs, while improving the health of their population. NFP can help high-performing hospitals and health systems to achieve these goals, through an innovative approach that effectively blends nursing process and nursing assessment, reflective practice and motivational interviewing skills with in-home services to improve care, improve health and reduce costs for this targeted, at-risk population.

### **IMPROVE CARE**

NFP naturally aligns with patient-centered medical home and health home models, connecting vulnerable women, babies and families to the services they need. NFP provides case management/care coordination combined with preventive services, including nursing assessments and screenings, incidental direct services, and health education and guidance within the scope of a registered nurse. NFP complements and supplements services provided in clinic-based or hospital-based settings. Some of the specific areas where NFP can improve care for first-time, low-income moms and their babies include:

- Helping clients obtain insurance coverage for mom and baby and access timely prenatal care and wellchild care services
- Conducting ongoing health and psychosocial risk assessments and screenings
- Providing anticipatory guidance and preventive services based on need, including monitoring weight gain, blood pressure, or other potential complications of pregnancy
- Helping clients plan future pregnancies and seek prevention health care services to improve interconception care
- Making appropriate referrals and coordinating care with other services, as needed; and
- Providing timely patient-centered communication and information exchange with primary care providers

"Nurse-Family Partnership (NFP) delivers on the Triple Aim and can positively impact your bottom line by delivering a significant return on investment. I recommend that you consider this evidence-based nursing intervention, which provides great career satisfaction for your staff, while notably improving community outcomes."

Dr. Thomas E. Beeman President/CEO Lancaster General Hospital

#### IMPROVE POPULATION AND COMMUNITY HEALTH

As a performance-driven, evidence-based prevention model, NFP is an ideal partner to address a variety of community needs identified through the federally required Affordable Care Act (ACA) Community Health Needs Assessment (CHNA), including improved health outcomes for pregnant women and their children, better patient compliance with medical providers' instruction, reductions in risk factors that lead to chronic conditions and reductions in health disparities in targeted populations.

NFP demonstrates significant success in achieving positive outcomes for its target population. Multiple evaluations—including three well-designed randomized controlled trials that began in 1977, 1988, and 1994 with different populations and geographies—have consistently demonstrated the significant and sustained impact of the NFP model. Through direct outreach and engagement of high-risk families and communities, NFP can help improve the health of your population through the following activities:



#### **REDUCE COSTS**

NFP is cost-effective. Independent studies confirm that NFP saves scarce public resources.

A RAND analysis found that for every \$1 invested in NFP to serve high risk families, communities can see up to \$5.70 in return due to savings in social, medical and criminal justice expenditures.

Cost savings specific to health systems and hospitals include reductions in adverse birth outcomes, emergency room visits for accidents, injuries and poisonings, as well as child maltreatment. Additionally, NFP can help hospitals and health systems to increase their competitive advantage in the marketplace through reducing patient churn and increasing continuity of care and providing opportunities to take advantage of pay-for-performance and other quality incentives.

#### INTERESTED IN PARTNERING? THE NFP NATIONAL SERVICE OFFICE CAN HELP!

The NFP National Service Office (NSO) provides free consultation support to explore partnership opportunities that will best meet the specific needs of your organization and your community. Whether you have interest in developing a new program, supporting a program in your community, connecting your patients to an existing program, or anything in between, the NFP NSO can help.

Ongoing NFP NSO support for local implementing agencies includes model-specific education and professional development, clinical and operational consultation, data reporting, analysis and continuous quality improvement, marketing and communications, and policy and advocacy.



For more information, contact:

Nurse-Family Partnership National Service Office 1900 Grant Street, Suite 400 Denver, Colorado 80203-4304 www.nursefamilypartnership.org 866.864.5226