Healthy Families Arizona Annual Evaluation Report FY2012

July 2011 - June 2012





Prepared by:

LeCroy & Milligan Associates, Inc.
2020 N. Forbes Blvd., Suite 104

Tucson, Arizona 85745

(520) 326-5154

www.lecroymilligan.com

Prepared for:

The Arizona Department of Economic Security
Division of Children, Youth and Families
Office of Prevention and Family Support
1789 W. Jefferson, Site Code 940A
Phoenix, Arizona 85007

Acknowledgements

This evaluation report represents the efforts of many individuals and many collaborating organizations.

The evaluation team for Healthy Families Arizona that contributed to this year's report includes evaluators Darlene Lopez, Ph.Dc., Kerry Milligan, MSSW, Craig W. LeCroy, Ph.D., Olga Valenzuela, B.A, and data management staff, Veronica Urcadez, Eloina Cardenas, and Frankie Valenzuela.

We extend appreciation to Janice Mickens, Manager, Jenna Shroyer, HFAz Statewide Program Coordinator, and Esthela Navarro, HFAz Statewide Program Coordinator, all in the Office of Prevention and Family Support, for their guidance and support. We would also like to extend our appreciation to Karen Bulkeley, former HFAz Manager. The members of the Healthy Families Arizona Steering Committee are thanked for their long term commitment, enthusiasm and leadership in Arizona (a list of members is included in the appendices). Thank you to the Healthy Families Arizona program managers and supervisors, who have worked diligently to ensure data are collected, submitted, and shared with staff for program improvement. Family Assessment Workers, Family Support Specialists and support staff at the sites have dutifully collected the data, and have participated in the evaluation process--all of whom help to tell an accurate story about Healthy Families Arizona. Lastly, we acknowledge the families who have received Healthy Families Arizona services.

Suggested Citation:

LeCroy & Milligan Associates, Inc. (2012). Healthy Families Arizona Annual Evaluation Report 2012. Tucson, AZ: LeCroy & Milligan Associates, Inc.



Table of Contents

Table of Contents	2
List of Exhibits	3
Executive Summary	4
Introduction	8
Healthy Families Arizona Statewide System	8
KIDS COUNT: The Status of Children Nationally and in Arizona	10
The Prevention-Protection Continuum	
In this Report	15
Evaluation Methodology	15
Program Updates	
Maternal, Infant, Early Childhood Home Visiting Competitive Grant	17
Program Affiliation in Yuma County	
Quality Assurance and Training	
Healthy Families Arizona Evaluation	18
Healthy Families Arizona Participant Characteristics	19
Length of Time in Program and Reasons for Termination	
Maternal Risk Factors	
Infant Characteristics	22
Race and Ethnicity	23
Assessment of Risk Factors	24
Summary	25
Key Healthy Families Arizona Services	26
Developmental Screens and Referrals for Children	26
Outcomes for Families	28
Parent outcomes	
Healthy Families Parenting Inventory Reveals Positive Parent Change	
Healthy Families Parent Inventory (HFPI) Subscales	29
Total Change Score on the HFPI	
Child Abuse and Neglect	30
Child Development and Wellness	32
Immunizations	32
Safety Practices in the Home	33
Mothers' Health, Education, and Employment	34
Subsequent Pregnancies and Birth Spacing	34
School, Educational Enrollment, and Employment	35
Substance Abuse Screening	37
2012 Participant Satisfaction Survey	38
Conclusions and Recommendations	40
References	43
Appendix A. Site Level Data	47
Appendix B. Healthy Families Arizona Steering Committee Members	61
Appendix C. Parent Survey	
Appendix D. Healthy Families Arizona Prenatal Logic Model	64
Appendix E. Healthy Families Arizona Postnatal Logic Model	65



List of Exhibits

Exhibit 1. Healthy Families Arizona Program Sites as of June 2012	9
Exhibit 2. The Prevention-Protection Continuum	12
Exhibit 3. Participants Included in the Evaluation for State Fiscal Year 2012	20
Exhibit 4. Most Frequent Reasons for Termination State Fiscal Year 2012	21
Exhibit 5. Selected Risk Factors for Mothers at Intake State Fiscal Year 2012	22
Exhibit 6. Risk Factors for Infants - State Fiscal Year 2012	22
Exhibit 7. Mother's Ethnicity* (N=2414) State Fiscal Year 2012	23
Exhibit 8. Father's Ethnicity* (N=2196) State Fiscal Year 2012	23
Exhibit 9. Percentage of Parents Rated Severe on Parent Survey Items PRENATAL	
(N=600)	24
Exhibit 10. Percentage of Parents Rated Severe on Parent Survey Items	
POSTNATAL (N=1874)*	25
Exhibit 11. ASQ-3 Screening State Fiscal Year 2012	26
Exhibit 12. ASQ-3 Follow-up Services State Fiscal Year 2012	27
Exhibit 13. Change in Subscales of the HFPI	29
Exhibit 14. Overall Change in Healthy Families Parenting Inventory Outcomes	30
Exhibit 15. Percent of Families Showing No Child Abuse and Neglect Incidences -	
2007, 2008, 2009, 2010, 2011, 2012	
Exhibit 16. Immunization Rate of Healthy Families Arizona Children	33
Exhibit 17. Percent of all Families Implementing Safety Practices	
Exhibit 18. Percentage of Mothers who Reported Subsequent Pregnancies State Fisc	al
Year 2012	35
Exhibit 19. Length of Time to Subsequent Pregnancy for Those Families	35
with Subsequent Births	35
Exhibit 20. Percent of Mothers Enrolled in School - State Fiscal Year 2012	
Exhibit 21. Mother's Employment Status	
Exhibit 22. Percent Screened and Assessed Positive on the CRAFFT	
Exhibit 23. Percent Who Strongly Agreed on Satisfaction Survey Statements 2012	39



Executive Summary

The Healthy Families Arizona program serves families with multiple stressors and risk factors that can increase the likelihood that their children may suffer from abuse or neglect. The continued effects of a weak economy in Arizona have increased the stresses on families. Arizona is currently ranked 46th in the nation in terms of child well-being according to the 2012 KIDS COUNT Data Book.

The Healthy Families program model is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Families that choose to participate receive home visits and referrals from trained staff. By providing services to underresourced, stressed, and overburdened families, the Healthy Families Arizona program fits into a continuum of services provided to Arizona families.

The Healthy Families Arizona Program

Healthy Families Arizona is in its twenty-first year, and is modeled after and accredited with the Healthy Families America initiative under the auspices of Prevent Child Abuse America. In September, 2011, a new four year federal Maternal, Infant, and Early Childhood Home Visiting (MIECHV) grant was awarded to Arizona to allow for the expansion of Healthy Families Arizona and another evidence based home visitation program. In State Fiscal Year 2012, with combined funding from the Arizona Department of Economic Security (DES), First Things First (FTF), and the new funding from MIECHV, Healthy Families Arizona is providing services to families living in 13 of 15 counties through 36 sites.

Who Does Healthy Families Arizona Serve?

A total of 3,447 children had data submitted for evaluation purposed during the current study year from July 1, 2011 through June 30, 2012. The evaluation of the statewide Healthy Families Arizona system covers only children that are 24 months old or younger (n=3,211). In order to have a meaningful evaluation of the program effects only the families where the most complete information on the effectiveness is available are included. This further restricts our dataset to include only those children that has received at least four home visits (n=2,477). Approximately, one-fourth of the families enter in the prenatal period and the average length of time in the program is just under 12 months.



Healthy Families Arizona program families have a significant number of maternal and infant risk factors at entry into the program compared to the overall state rates. The mothers enrolled into Healthy Families Arizona are more likely to be single parents, unemployed, undereducated, living in poverty, and receiving AHCCCS. The infants are also more likely to suffer from birth defects, be of low birth weight, be born preterm, and have positive alcohol or drug screens at birth than for Arizona as a whole.

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona State Rates
Teen Births (19 years or less)	16.9%	11.4%	9.9%
Births to Single Parents	79.3%	74.3%	44.3%
Less Than High School Education	44.0%	43.8%	21.7%
Not Employed	78.7%	82.5%	50.3%
No Health Insurance	6.6%	4.5%	3.5%
Receives AHCCCS	84.7%	88.2%	53.0%
Late or No Prenatal Care	23.9%	33.2%	17.8%
Median Yearly Income	\$7,800	\$9,600	\$46,789
Risk Factors for Infants	Prenatal Families	Postnatal Families	Arizona State Rates
Born < 37 weeks gestation	11.5%	16.4%	10.0%
Birth Defects	1.0 %	1.4%	0.6%
Low Birth Weight	9.5%	13.8%	7.1%
Positive Alcohol/Drug Screen	0.7%	6.7%	1.1%

Sources: 2010 and 2011 data from the Arizona Department of Health Services Vital Statistics records, and the U.S. Census Bureau, American Community Survey, 2010

Outcomes for Families and Children Participating in Healthy Families

The Healthy Families Parenting Inventory (HFPI) revealed statistically significant improvement on all subscales at 6 months and all but social support at 12 months. This indicated that Healthy Families Arizona participants are reducing their risk factors related to child abuse and neglect.

Parents in Healthy Families report significant changes in:

- Increased social support
- Increased problem solving
- Increased personal care
- Improved mobilization of resources
- Increased parenting role satisfaction
- Improved parent/child interaction
- Improved home environment
- Improved parenting efficacy
- Decreased depression



Child Development and Wellness

Timely immunizations remain an important component for positive child health and development outcomes. This year, there was a large increase in the number of infants reported as receiving immunizations at each immunization period through the first year of life, but a drop in percentage that had received all immunizations by age 18 months this year compared to last year. At 2 months, 94% of children had received the appropriate immunizations compared to 70% last year. The immunization rate for the children of Healthy Families Arizona participants by 18 months was 68% compared to 74% last year, and a 76% immunization rate for 2 year-olds in the state of Arizona as a whole. Healthy Families Arizona also educates families on home safety practices. Results indicate that families who have been in the program for 12 months: 99.7% of participants are using car seats, 95.2% have poisons locked, and 90.5% have working smoke alarms. Developmental delays are screened for at regular intervals in the Healthy Families Arizona program to assure that children who need further services are referred appropriately. The statewide performance measure goal of 80% of children screened for developmental delays was exceeded this year.

Child Abuse and Neglect

Records of child abuse and neglect incidents (substantiated) were examined for program participants who had received services for at least six months. The statewide program performance measure goal is for 99.7% of families to have no substantiated reports to child protective services. This year the percent of families with no child abuse or neglect incidences was 97.9%, and did not meet the performance measure goal. A total of 44 Healthy Families Arizona families had a substantiated case of child abuse and/or neglect out of 2,099 families that had participated in the program for at least 6 months.

Mothers' Health, Education, and Employment

In addition to the parenting outcomes noted earlier, Healthy Families Arizona also seeks to improve the health, education, and employment outcomes among mothers so that they are better equipped to meet their families' needs. Research shows that spacing pregnancies at least 24 months apart has positive health benefits for the mother. This year only 2.7% of mothers with a subsequent pregnancy waited over 24 months before they got pregnant with their next child, while 60% the mothers with subsequent pregnancies waited a year or less. The number of mothers enrolled in school has continued to decrease in the last two years, with 16.4% enrolled at 1 year of program participation compared to 17.7% last year and 22.0% in 2010. The home visitors also complete screenings and provide referrals for substance abuse problems.



Substance abuse continues to be a difficult problem for families. Approximately 45% of the participants were screened as having potential substance abuse problems during the first 2 months of the program, with 15% continuing to have problems after six months in the program.



Introduction

Healthy Families Arizona is in its twenty-first year after its establishment as a home visitation services for at-risk families initiative of the Arizona Department of Economic Security (DES) in 1991. The Healthy Families Arizona program is modeled after the Healthy Families America initiative and is accredited by Prevent Child Abuse America. Healthy Families America began under the auspices of Prevent Child Abuse America (formerly known as the National Committee to Prevent Child Abuse) in partnership with the Ronald McDonald House Charities and was designed to promote positive parenting, enhance child health and development, and prevent child abuse and neglect. Healthy Families America has 442 affiliated program sites in 43 States, the District of Columbia, and all five US territories. In February 2011, the US Department of Health and Human Services named Healthy Families America one of only seven proven and effective home visiting models and the only model recognized as showing outcomes in all eight benchmark areas. The Healthy Families program model was also noted for leadership in the categories of "Child Development and School Readiness" and "Reductions in Child Maltreatment".

The Healthy Families program model is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Families that choose to participate receive home visits and referrals from trained staff. By providing services to underresourced, stressed, and overburdened families, the Healthy Families Arizona program fits into a continuum of services provided to Arizona families.

Healthy Families Arizona Statewide System

Until the economic downturn in 2009, all of Healthy Families Arizona was funded solely through the Arizona Department of Economic Security (DES). Due to the economic downturn, DES budget reductions resulted in a decrease of the number of Healthy Families Arizona sites from 58 to 26. However, also in 2009, First Things First (FTF) released emergency dollars to agencies providing home visiting services consistent with the goals of FTF. On May 22, 2012, programs began enrolling families through additional funds from the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Grants administered by the Arizona Department of Health Services. In State Fiscal Year 2012, funding for the statewide system included \$6,361,649 from DES, \$5,876,715 from FTF, and \$117,212 from MIECHV.



The combined funding from DES, FTF, and MIECHV allows the Healthy Families Arizona programs and sites to provide services to families living in 13 counties and 234 zip code areas around Arizona. For the 2012 state fiscal year, there were 11 programs and 36 sites (13 DES funded, 11 FTF funded, 3 MIECHV funded, and 9 receiving funding from more than one source). See Exhibit 1 for a list of sites funded in fiscal year 2012.

Exhibit 1. Healthy Families Arizona Program Sites as of June 2012

Maricopa County	Cochise/Santa Cruz County
Central Phoenix	Douglas/Sierra Vista
Maryvale	Nogales
East Valley	Graham/Greenlee County
Sunnyslope	Safford
Mesa	Mohave County
West Phoenix	Kingman
Central Phoenix #1	Bullhead City
Central Phoenix #2	Lake Havasu (in Mohave County)
North Phoenix	Coconino County
Southeast/Northeast Maricopa	Page
Combination Phoenix	Flagstaff #1
South Phoenix	Flagstaff #2
Southeast Maricopa #7	Yavapai County
Southeast Maricopa #8	Prescott
MIECHV Phoenix	Navajo County
Pima County	Winslow
Pima Team #8	Tuba City
Pima Team #9	Yuma
Pima Team #10	Yuma #15
Pima Team #11	Yuma #70
Pima Team #27	Pinal County
MIECHV Tucson	MIECHV Casa Grande/Coolidge

KIDS COUNT: The Status of Children Nationally and in Arizona

Since 1990, the Annie E. Casey Foundation, a private national philanthropy, has compiled and published an annual *KIDS COUNT Data Book*. The purpose of KIDS COUNT is to provide national and state level data on the well-being of children living in the United States. The KIDS COUNT indicators are collected across all states at least biannually for children from birth through high school. As research on child development and well-being has expanded over the years, KIDS COUNT updated their index to include newly available state-level data and address the gains in knowledge. The newest edition, the 2012 *KIDS COUNT Data Book*, has expanded from a 10-indicator index to 16 indicators within four categories. The four categories are Economic Well-Being, Education, Health, and Family and Community. The 2012 *KIDS COUNT Data Book* states that while there is not a consensus on the best way to track child well-being, the measurements should at least acknowledge that:

- Children are affected by both positive/protective factors as well as negative/risk factors;
- A child is affected by their environment which includes family, peer relationships, communities, institutions, and cultural influences;
- Both basic survival (mortality and heath) and quality of life (life skills and happiness) are important;
- Multiple domains, such as health, education, and economic well-being influence a child's life;
- The developmental stages of childhood should be incorporated; and
- Both indicators of current well-being as well as factors that affect future outcomes should be included

Nationally, children's Economic Well-Being status has gotten worse. Of note is a 22% increase in parental unemployment and a 16% increase in the number of children living in poverty since 2005. At the national level, the long-term changes in policy in education, health, and safety have led to improvements in the categories of Education and Health. Graduation rates as well as reading and math proficiency have improved. More children have health insurance due to the Children's Health Insurance Program (CHIP) and it's reauthorization in 2009 (CHIPRA) which provides health insurance to low-income children who do not meet the eligibility requirements for Medicaid. In addition, fewer children and teenagers are dying, and fewer teens are abusing drugs and alcohol. However, 1 in 12 children still lack health insurance and 1 in 14 teens are abusing drugs and alcohol. In the category of Family and Community, it has been mixed. There are more children living in single parent



families and high-poverty areas, but teenage births and head of households without a high school diploma have both decreased.

The National indicators are used to show trends over time in child well-being. For states, the most currently available data is collected and states are ranked within each category based on the indicators and given an overall ranking. Arizona is ranked 46 overall, as well as in the Economic Well-Being, Education, and Family and Community rankings. Arizona does better in the category of Health, coming in at rank 36. Overall, Arizona ranked worse than the national trend in 15 of the 16 indicators. The percentage of low-birthweight babies at 7.1% was the only indicator better than the national average of 8.2%. In summary, Arizona does not score well in the realm of child well-being. This indicates that children in Arizona are more at risk for poor outcomes both in childhood as well as when they transition to adults.

One additional comment that KIDS COUNT made in the 2012 KIDS COUNT Data Book is that based on the years of research and data, the best predictors of success for a child include:

- getting a healthy start at birth and maintaining healthy development in the early years;
- being raised by two married parents;
- having adequate family income;
- doing well in school;
- graduating high school and completing postsecondary education or training;
- avoiding teen pregnancy and substance abuse;
- staying out of trouble; and
- becoming connected to work and opportunity.

The Prevention-Protection Continuum

Based on both the predictors of success for children as well as the predictors of risk for child abuse and neglect an action plan for a comprehensive child abuse and neglect prevention system in Arizona was initially set forth in 2004 with recommendations that "a family at risk for child abuse and neglect is likely to cross multiple risk and protective factors. Thus, the recommended strategy is one that encompasses all domains, and involves an intelligent wraparound service delivery concept for children and families at risk for child abuse and neglect" (Action Plan for Reform of Arizona's Child Protection System, 2004). There is a continuing need for examination and refinement of the "continuum of services" across state agencies and



community-based organizations to maximize the value of limited resources to serve families in need. Since its inception, Healthy Families Arizona has sought to provide a continuum of services for children and families, so that families are served appropriately as their needs increase or decrease. A continuum of services ensures that the family receives the appropriate level of service with sufficient support, coordination, consistency, and follow-up to provide the optimal chance for success.

The purpose of this Prevention-Protection Continuum is to provide a better understanding of where Healthy Families Arizona fits into the overall model of prevention and protection services. The model starts by conceptualizing a prevention-protection continuum. As Exhibit 2 shows, the continuum starts at the far left, representing primary or universal prevention, and continues to the far right, with required child protection. Along this continuum families function at five different levels: families without significant difficulties (5), families with identifiable difficulties (4), families with significant risk factors present (3), families likely to neglect or abuse their children (2), and families with child protection required (1).

Families with Families with Families very significant risk identifiable likely to abuse factors present **Families** difficulties or neglect needing Families with child few difficulties protection Prevention **Protection Provide support** Identify and **Protect** services to address specific against harm risks in families strengthen positive to prevent development and maltreatment and functioning promote wellbeing

Exhibit 2. The Prevention-Protection Continuum

This framework is helpful in understanding how Healthy Families Arizona addresses the needs of a wide range of families and spans much of the prevention-protection continuum. The program is considered a prevention program designed to promote wellness while also preventing maltreatment. On the wellness side, Healthy Families considers prevention more than the absence of disease or discord—it involves the promotion of protective factors that impact wellness such as support, parenting competence, and positive parent child interactions. The program also concerns itself with child maltreatment and identifies families at risk and seeks to reduce child neglect and abuse in the home. It is important to recognize that all families can benefit from the different interventions—for example, home visitation efforts to promote support and well-being benefit both families with less serious problems as well as families who are at risk for maltreatment.

Giving another example, when working with families with identifiable difficulties (scale level 4), the program emphasizes providing support and identifying services to help families ease stress and function more effectively. For families with identifiable risk factors present (scale level 3), the focus will be on assessing the level of risk and the multiplicity of risk factors. Depending on the assessment, families may be referred for psychological treatment, domestic violence services, or substance abuse counseling. These families will need to be more closely monitored and supervised.

For families likely to neglect or abuse (scale level 2), the risk factors are severe enough that monitoring the family's progress, providing targeted services, and involving supervisors in ongoing decision-making is required. If families are unable to reduce their risk factors, additional services are required. For example, families with substance abuse problems would receive more intensive attention because research has shown that substance abuse is a significant risk factor associated with neglect and abuse.

For families that require protection for the children (scale level 1) Child Protective Services must be brought into the picture. Although the goal of Healthy Families is to prevent abuse and limit the need for Child Protective Services, the program provides an opportunity for observation and monitoring of families that can bring safety to a child when needed. Without this "window" into the family's life, a child needing protection might not be identified.



It is important to note that the outcomes of most interest to program staff may vary with the different types of families described above. For example, the program can be evaluated according to outcomes related to promoting family wellness, and it can be evaluated with regard to its ability to avert abuse among families with the highest risk. It is also important to realize that families change and move up and down the continuum depending on a number of factors. Several programmatic implications emerge from the prevention-protection continuum conceptualization. Child maltreatment is more likely when numerous high risk factors are present. However, it is possible that at this high level of risk, prevention of maltreatment may rarely occur. This may be a situation where it is too little and too late to truly prevent child maltreatment. It is possible that Healthy Families works more effectively in preventing families from moving toward greater risk factors and higher levels of risk. Because these families at a lower level of risk have an even lower base rate of child maltreatment it is difficult to test this theory with research. Hopefully, this continuum captures the many different families the Healthy Families Arizona programs attempts to serve and suggests the need for an evaluation that can assess a wide range of outcomes.



In this Report

The purpose of the 2012 Healthy Families Arizona Annual Evaluation Report is to provide information on families' outcomes, program performance measures, process and implementation information, and evaluation information that can be used to guide program improvement. This report covers the state fiscal year 2012 from July 1, 2011 to June 30, 2012.

The evaluation of Healthy Families Arizona includes both process and outcome evaluation. The process evaluation includes an update of statewide implementation, describes the characteristics of families participating in the program and provides narratives from families participating in the program. The outcome evaluation examines program outcomes and looks at the program's impact across a number of measures, with comparisons to previous years when appropriate and available. Detailed appendices provide specific site data on process and outcome variables. The description of evaluation methodology outlines the methods used for each part of the report.

The 2012 annual evaluation report has been designed to provide critical information and reporting of yearly data for basic accountability and credentialing and is limited to only those families within 24 months of the birth of the infant. Currently, the Healthy Families Arizona evaluation also includes the creation and distribution of quarterly cumulative performance reports for ongoing program monitoring. These reports are used during quality assurance and technical assistance site visits to review and assess progress on key program activities, including administration rates for developmental screenings and parenting skills inventories, attainment of immunization data, and substance abuse screening.

Evaluation Methodology

The Healthy Families Arizona evaluation includes both a basic process evaluation component and an outcome evaluation component. The primary questions for the process evaluation are: Who participates in the program and what are the services provided? The primary question for the outcome evaluation is: What are the short and long term outcomes for families in the program?

The goal of the process component of the evaluation is to describe the participants involved in the Healthy Families Arizona program and document the services they



receive. In the process evaluation, the program "inputs" such as numbers served, participant characteristics, and services received are described.

Also, information relative to Critical Elements and expected standards from Healthy Families America is provided as a benchmark for assessing some aspects of the implementation. The primary data for the process evaluation comes from the management information system developed to process data for Healthy Families Arizona. Sites are required to submit data that captures enrollment statistics, number of home visits, administration of assessment and outcome forms, descriptions of program participants, types of services provided, etc.

The overall aim for the outcome study is to examine program effects and outputs, at both the parent and child level on a number of different outcomes. The evaluation team has worked together with program staff to develop and select key program measures that are used to provide feedback and to measure the program's ability to achieve specific outcomes. The primary activities of the outcome evaluation are to: examine the extent to which the program is achieving its overarching goals, examine the program's effect on short term goals, and examine the extent to which participant characteristics, program characteristics, or community characteristics moderate the attainment of the program's outcomes. For most of the outcome measures, Healthy Families home visitors collect baseline (pretest) data and follow-up data at different time points of program participation: 6 months, 12 months, 18 months, and 24 months. The outcome evaluation also includes examination of substantiated cases of child abuse and neglect obtained through the Department of Economic Security's CHILDS database.

The process and outcome components of the evaluation were developed and guided by the logic models for both the prenatal and postnatal programs. Logic models for the prenatal and postnatal components of Healthy Families Arizona are presented in the Appendices.



Program Updates

Maternal, Infant, Early Childhood Home Visiting Competitive Grant

In July 2010, the Arizona Department of Health Services was awarded \$1.8 million each year with extension for five years to implement the Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program. In September 2011, the Arizona Department of Health Services was awarded two additional grants:

- * The Federal Fiscal Year 2011 Formula Funding for \$2.6 million each year with extension for five years; and
- * The MIECHV Competitive Grant for \$9.4 million each year with extension for four years.

Only ten States were awarded the Competitive Grant and only three States including Arizona received the full 9.4 million in funding. Grant Funding supports: Nurse Family Partnership and Healthy Families, along with the Promising Practice of Family Spirit with the White Mountain Apache Tribe.

In addition to program expansion funds, the grant allows for the utilization of funds to begin the implementation of system building processes. Activities may include expanding and supporting regional home visiting coalitions, system wide data collection and analysis, and training and work force development opportunities for Family Support Specialists and Supervisors.

Interagency agreements are in place between the Arizona Department of Economic Security, First Things First, and the Arizona Department of Health Services, the administrative agency for the MIECHV grant. These agreements relate to evaluation, training, quality assurance, technical assistance, program development, and other program related services. The Arizona Department of Economic Security acts as Central Administration for the Healthy Families Arizona Program. Quarterly meetings are conducted between the three agencies to enhance collaboration and future program guidance.

The MIECHV funded programs started enrolling families on May 22, 2012. There are three full teams of Family Support Specialists in Maricopa County, Pima County, and



Pinal County. There have also been staff increases in Graham County and in Winslow which is in Navajo County.

Program Affiliation in Yuma County

On September 26, 2011, the Department of Economic Security Central Administration office of the Healthy Families Arizona Program granted official affiliation to Healthy Families Yuma County, comprised of two teams, to the State system. As an affiliated program, the Yuma County Healthy Families program became an active participant in all aspects of the Healthy Families Arizona multi-site system to satisfy all of the requirements of Healthy Families America accreditation processes.

Quality Assurance and Training

An additional Quality Assurance (QA)/Technical Assistance (TA) specialist was hired in state fiscal year 2012, and there are now 3 full-time QA specialists who will continue facilitation of annual sites visits and oversee the continued quality improvement aspects of program implementation. The QA team reviews the standards of best practice and provides technical assistance based on the sites' needs and issues at each site visit. The quarterly cumulative performance reports are used at each visit and data systems have been developed to provide information about home visit rates.

Healthy Families Arizona Evaluation

Due to the extensive requirements of the MIECHV grant, two systems are in place to handle the evaluation needs of the program. One is for the statewide Healthy Families Arizona Program as a whole, and another is for the MIECHV funded sites only. Data collection trainings have been conducted to clarify the data requirements for each system to the sites. The Department of Economic Security Central Administration collaborated with the MIECHV evaluation team to integrate the data collection requirements into the standard data collection for the MIECHV funded sites. LeCroy & Milligan Associates continues to provide the statewide evaluation instruments. These instruments were revised in June 2012 and all sites were trained on the revisions through webinars prior to their implementation on July 1, 2012. The first MIECHV data collection training took place on May 21, 2012. Additional trainings will be held as new MIECHV funded sites are approved.



Healthy Families Arizona Participant Characteristics

A total of 3,447 children had data submitted for evaluation purposed during the current study year from July 1, 2011 through June 30, 2012. A total of 1,799 were funded through the Department of Economic Security; 1,581 through First Things First; and 67 through MIECHV. The evaluation of the statewide Healthy Families Arizona system covers only children that are 24 months old or younger (n=3,211).

In order to have a meaningful evaluation of the program effects only the families where the most complete information on the effectiveness is available are included. This further restricts our dataset to include only those children where we have full data showing that they have received at least four home visits (n=2,477). Thus, the data for this report focuses on participants who were within the first 24 months after the birth of the infant and "actively engaged" (received four or more home visits) in the Healthy Families program regardless of when they entered the program.

Just under a quarter (24.2%) of the families enter the program in the prenatal period (prenatal participants) and about three quarters (75.8%) of the families enter the program after the birth of the child (postnatal participants). For the July 2011 to June 2012 evaluation cohort, there were 600 prenatal and 1,877 postnatal participants. Exhibit 3 presents the total numbers of prenatal and postnatal participants actively engaged from July 2011 to June 2012.



Exhibit 3. Participants Included in the Evaluation for State Fiscal Year 2012

County	Site	Prenatal	Postnatal	Total
Cochise	Douglas/ Sierra Vista	7	41	48
Coconino	Flagstaff #1	32	20	52
	Page	5	3	8
	Tuba City	19	35	54
	Flagstaff #2	9	10	19
Graham	Safford	6	23	29
Maricopa	Central Phoenix	17	71	88
	Maryvale	19	90	109
	East Valley	27	68	95
	Sunnyslope	15	104	119
	Mesa	22	91	113
	West Phoenix	25	88	113
	Central Phoenix #1	22	60	82
	Central Phoenix #2	32	74	106
	North Phoenix	23	59	82
	Southeast/Northeast Maricopa	23	66	89
	Combination Phoenix	27	61	88
	South Phoenix	9	44	53
	Southeast Maricopa #7	18	58	76
	Southeast Maricopa #8	18	77	95
Mohave	Bullhead City	22	73	95
	Kingman	45	31	76
	Lake Havasu City	26	47	73
Navajo	Winslow	13	23	36
Pima	Pima #8	22	60	82
	Pima #9	20	72	92
	Pima #10	17	45	62
	Pima #11	12	86	98
	Pima #27	8	44	52
Santa Cruz	Nogales	9	32	41
Yavapai	Prescott	6	81	87
Yuma	Yuma #15	18	62	80
	Yuma #70	7	78	85
Total		600	1877	2477

Length of Time in Program and Reasons for Termination

In State Fiscal Year 2012, a total of 1,036 families closed. The length of time in the program for closed families was slightly higher than for last year but still not as high as in 2010. For all families (N=1,036) who closed in State Fiscal Year 2012:

- The median number of days in the program was 290 days (as compared to 257 in 2011, and 305 in 2010);
- The average length of time in the program was 352 days (as compared to 317 in 2011, and 385 in 2010); and
- Thirty-eight percent of families were in the program one year or longer (as compared to just over 30% in 2011, and 40% in 2010).

Exhibit 4 shows the most frequent reasons families left the program during this year. A breakout by site is presented in Appendix A.

Exhibit 4. Most Frequent Reasons for Termination State Fiscal Year 2012

Reason	Prenatal	Postnatal
Moved away	28.0%	20.9%
Family refused further services	14.4%	20.3%
Did not respond to outreach efforts	11.3%	18.5%
Self-sufficiency	11.7%	12.2%
Other	8.6%	6.0%
Refused worker change	7.4%	8.5%
Unable to contact	6.6%	5.6%

Maternal Risk Factors

Upon enrollment into Healthy Families Arizona, both prenatal and postnatal mothers have certain risk factors that are higher than the average rates for all mothers in the State of Arizona. There has been a decrease in the percentage of Healthy Families Arizona mothers who are teenagers compared with last year. In 2012, approximately 17% of prenatal mothers and just over 11% of postnatal mothers enrolled are teens compared to 23% and 14% respectively in 2011. Approximately three –fourths of all mothers are single parents at enrollment. Mothers enrolled in Healthy Families Arizona are twice as likely to have less than a high school education (44%) compared to all mothers in the State (22%). Four out of five of the mothers are unemployed and receiving AHCCCS at enrollment. The median income is well below the poverty level indicating that many participants are living in poverty. In relation to the state rates, these data confirm that Healthy Families Arizona participants do represent an "at-



risk" group of mothers and that the program has been successful in recruiting families with multiple risk factors associated with child abuse and neglect and poor child health and developmental outcomes. Exhibit 5 presents selected risk factors for both prenatal and postnatal mothers at intake compared with state rates.

Exhibit 5. Selected Risk Factors for Mothers at Intake State Fiscal Year 2012

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona state Rates
Teen Births (19 years or less)	16.9%	11.4%	9.9%*
Births to Single Parents	79.3%	74.3%	44.3%*
Less Than High School Education	44.0%	43.8%	21.7%**
Not Employed	78.7%	82.5%	50.3%***
No Health Insurance	6.6%	4.5%	3.5%*
Receives AHCCCS	84.7%	88.2%	53.0%*
Late or No Prenatal Care	23.9%	33.2%	17.8%*
Median Yearly Income	\$7,800	\$9,600	\$46,789 ***

Percent does not include "unknown."

Note: Percentages for the combined total for prenatal and postnatal families can be found in Appendix A.

Infant Characteristics

In addition to mother risk factors, information about infant risk factors is collected at intake for postnatal families and at birth for prenatal families. This information helps to indicate the level of need of the families served by the program. The following exhibit displays the high-risk characteristics of the newborns that entered prenatally and postnatally.

Exhibit 6. Risk Factors for Infants - State Fiscal Year 2012

Risk Factors for Infants	Prenatal Families*	Postnatal Families**	Arizona State percent	
Born < 37 weeks gestation	11.5%	16.4%	10.0%***	
Birth Defects	1.0 %	1.4%	0.6%***	
Low Birth Weight	9.5%	13.8%	7.1%***	
Positive Alcohol/Drug Screen	0.7%	6.7%	1.1%***	

^{*}The Family Support Specialist collects this information either from the family or from a CPS referral form for prenatal families.

The overall risk factors for infants are similar to prior years. The percentage of postnatal Healthy Families Arizona program infants born early (less than 37 weeks gestation) is 6.4% higher than the overall state rate, suggesting that the families being

^{*}Source: 2011 data from the Arizona Department of Health Services Vital Statistics records.

^{**}Source: 2010 data from the Arizona Department of Health Services Vital Statistics records.

^{***}U.S. Census Bureau, American Community Survey, 2010

^{**}Family Assessment Workers collect this information from hospital records for postnatal families.

^{***2010} data from the Arizona Department of Health Services Vital Statistics records.

identified for service have a significant level of need. The percentage of low birth weight infants in the program also remains high in comparison to the state rate.

Race and Ethnicity

The Healthy Families Arizona program serves a culturally diverse population. In the following two exhibits, race and ethnicity is examined for all mothers and fathers based on information gathered at enrollment. More than half of mothers and fathers enrolled in the program are Hispanic. Starting with July 1, 2012, race and ethnicity (Hispanic/Non-Hispanic) will be two separate variables. Site level data is available in Appendix A.

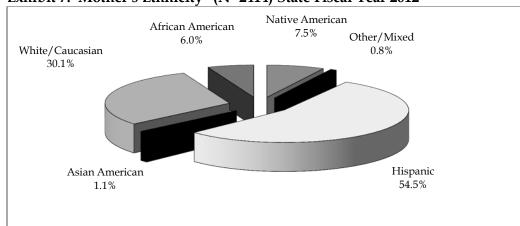
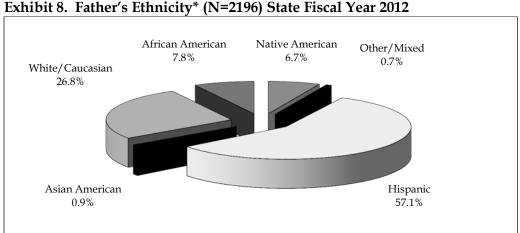


Exhibit 7. Mother's Ethnicity* (N=2414) State Fiscal Year 2012

^{*}This includes all mothers who entered the program either prenatally or postnatally.



^{*}This includes all fathers who entered the program either prenatally or postnatally.

Assessment of Risk Factors

Both mothers and fathers are assessed at intake using an interview with the Parent Survey¹. The Parent Survey helps the program learn about the family's circumstances and life events that place them at risk for child maltreatment and other adverse outcomes. During the intake process, the Family Assessment Worker evaluates each family across the 10 domains of the Parent Survey. The survey is administered in an interview format and the items are then rated by the worker according to level of severity.

The percentage of parents scoring *severe* on each of the scales is presented for prenatal mothers and fathers and for postnatal mothers and fathers in Exhibits 9 and 10.

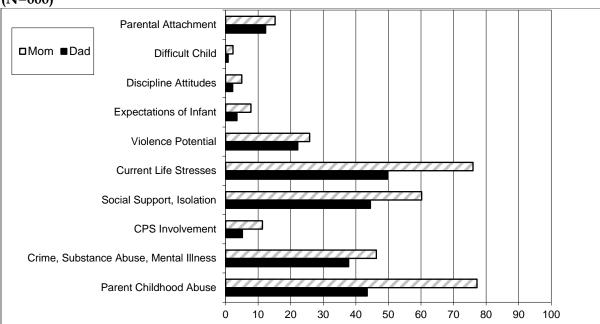


Exhibit 9. Percentage of Parents Rated Severe on Parent Survey Items PRENATAL (N=600)

¹ Previously known as The Family Stress Checklist, it was renamed the Parent Survey based on revisions to focus on a more strength based perspective; however, the rating scale remains unchanged. More information on this instrument is provided in Appendix B.



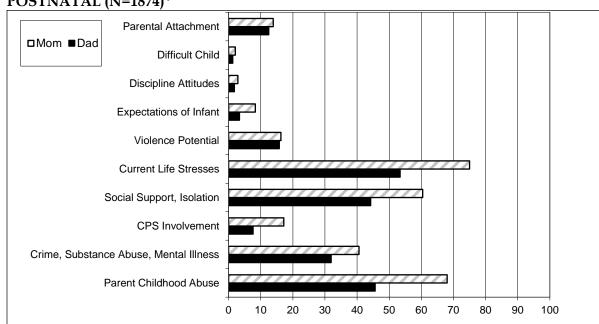


Exhibit 10. Percentage of Parents Rated Severe on Parent Survey Items POSTNATAL (N=1874)*

Consistent with previous years' data, the four factors rated most severe by both mothers and fathers are: history of childhood abuse (for the parent); current life stressors; social support and isolation; and a history of crime, substance abuse, or mental illness. A higher percentage of prenatal mothers had severe scores on history of childhood abuse (77.2%) and history of crime, substance abuse, or mental illness (46.3%) than postnatal mothers at 68.0% and 40.6% respectively.

Summary

The process evaluation for fiscal year 2012 suggests that the Healthy Families Arizona program is effectively reaching parents and their babies who have high risks of child maltreatment and other unhealthy outcomes. Overall, the Healthy Families Arizona program is reaching families that are impoverished, stressed, socially disadvantaged, and lacking in resources to manage the demands of parenting. In general, the prenatal families have slightly higher risks than the postnatal families. However, the risk factors of low birth weight babies and preterm birth are lower for those families participating in Healthy Families Arizona prenatally than for those that enter in the postnatal period. This suggests that these high risk families benefit from the early support that is offered in the home visitation program.

^{*} Does not include missing data

Key Healthy Families Arizona Services

The primary goals of reducing child abuse and neglect and improving child well-being are only attainable when families stay engaged in the program and receive the services and resources they need. One important aspect of the Healthy Families program model is linking families with needed community resources. Home visitors provide not only assistance and guidance in the home, but they also connect families with education, employment, and training resources, counseling and support services, public assistance and health care services.

Developmental Screens and Referrals for Children

Developmental screens are used to measure a child's developmental progress and to identify potential developmental delays requiring specialist intervention. The home visitor administers the Ages and Stages Questionnaire, Third Edition (ASQ-3) to help parents assess the developmental status of their child across five areas: communication, gross motor, fine motor, problem solving, and personal-social.

The Healthy Families Arizona program administers the ASQ-3 at 4, 6, 9, and 12 months in the first year of the infant's life and then every six months until the child is three years of age and then yearly at age 4 and 5. The statewide program performance goal is to screen at least 80% of the children in the program. As Exhibit 11 shows, the number of children receiving the ASQ-3 at each interval is exceeding the program goal of 80% at all time periods. This is great improvement over last year when that goal was only exceeded at the 4-month time period. Overall, the rates of screening for this year range from 8.6% to 13.2% higher than in Fiscal Year 2011. This is a significant improvement from last year.

Exhibit 11. ASQ-3 Screening State Fiscal Year 2012

Interval ASQ-3 Screening	Percent of children Screened with ASQ-3	Percent screened as delayed
4-month	93.5%	2.6%
6-month	92.0%	2.1%
9-month	91.7%	2.3%
12-month	88.2%	1.8%
18-month	85.2%	5.0%
24-month	80.9%	6.6%

Healthy Families Arizona works to ensure that children who may have developmental delays obtain needed interventions. Program data tracks what happens after a family's ASQ-3 is scored as follows: 1) the child is screened as having no delays, 2) the child is referred for further assessment and is determined to have no delays upon a more extensive assessment, 3) families are referred to different services such as the Arizona Early Intervention Program (AzEIP) or other early intervention or therapy, or 4) the home visitor may provide developmental intervention or education to the family.

Although 2% to 7% of children (depending on their age) are initially screened as delayed in their development, up to 13% of the children who initially screen as delayed on the ASQ-3 in the early months of their life are determined to be "not delayed" upon further assessment (see Exhibit 12 below). For example, of the families at 4 months who screened as delayed on the ASQ-3 and were referred for more assessment, 3 families showed no delay, 21 families were referred to the AzEIP, 3 families were referred to an early intervention program, 36 families received developmental intervention, 6 families were referred to specialized therapy, and 11 declined further referral. The ASQ-3 screening provides a valuable service to families because it enables them to access appropriate services to meet their child's particular needs. This practice is consistent with the American Academy of Pediatrics strategic plan to promote developmental screening and establish a medical home when needed (Tait, 2009). There is a national effort to increase early developmental screening after studies found that up to 70% of developmental problems were not identified until school entry (e.g., see Glascoe & Dworkin, 1993). The following exhibit shows the outcome of these follow-up assessments that are completed with families at the different time intervals.

Exhibit 12. ASQ-3 Follow-up Services State Fiscal Year 2012

Screening Interval	Continued Assessment shows "no delay" % (n)	Referred to AzEIP % (n)	Referred to other Early Intervention % (n)	Provided Developmental Intervention % (n)	Referred to Therapy % (n)	Parent Declined Referral % (n)
4-month	6.4% (3)	44.7% (21)	6.4% (3)	76.6% (36)	12.8% (6)	23.4% (11)
6-month	5.4% (2)	62.2% (23)	5.4% (2)	64.9% (24)	13.5% (5)	5.4% (2)
9-month	9.5% (2)	47.6% (10)	4.8% (1)	57.1% (12)	4.8% (1)	14.3% (3)
12-month	0.0% (0)	38.9% (7)	0.0% (0)	66.7% (12)	5.6% (1)	11.1% (2)
18-month	3.2% (1)	54.8% (17)	6.5% (2)	77.4% (24)	3.2% (1)	25.8% (8)
24-month	13.6% (3)	68.2% (15)	4.5% (1)	72.7% (16)	9.1% (2)	22.7% (5)

Note: Percentages do not equal 100% as multiple referrals can happen for a single child.



Outcomes for Families

The Healthy Families Arizona program focuses the outcomes evaluation on the following primary indicators:

- Parent outcomes
- Child development and wellness
- Mother's health, education, and employment
- Child abuse and neglect

Parent outcomes

One of the primary intermediate goals of the Healthy Families Arizona program is to have a positive influence on parenting attitudes and behaviors. While reducing child abuse and neglect is the ultimate outcome, intermediate objectives such as changes in parenting behaviors can inform us about progress toward the ultimate goal. The intermediate goals of the Healthy Families program revolve around a few key factors known to be critical in protecting children from maltreatment (Jacobs, 2005):

- providing support for the family;
- having a positive influence on parent-child interactions;
- improving parenting skills and abilities and sense of confidence; and
- promoting the parents' healthy functioning.

Recent research from a randomized clinical trial of the Arizona Healthy Families program (LeCroy & Krysik, 2011) supports the finding that the program can produce positive change favoring the experimental group in contrast to the control group across multiple outcome domains such as violent parenting behavior, parenting attitudes and practices, parenting support, mental health and coping, and maternal outcomes.

Healthy Families Parenting Inventory Reveals Positive Parent Change

In order to evaluate critical goals of the Healthy Families program, the evaluation team developed the Healthy Families Parenting Inventory (HFPI) in 2004 (LeCroy, Krysik, & Milligan, 2007). This instrument was developed, in part, because of measurement difficulties identified in the literature (See LeCroy & Krysik, 2010). The development of the HFPI was guided by several perspectives and sources: the experience of the home visitors in the Healthy Families Arizona program; data gathered directly from home visitors, supervisors, and experts; information obtained from previous studies of the Healthy Families program; and examination of other



similar measures. The process included focus groups with home visitors, the development of a logic model, and a review of relevant literature. In an initial validation study the pattern of inter-item and item-to-subscale correlations as well as an exploratory factor analysis and sensitivity to change analysis supported the nine-factor model of the HFPI. This work was recently published in the journal *Infant Mental Health* (Krysik & LeCroy, 2012). The final instrument includes 9 scales: Social Support, Problem-solving, Depression, Personal Care, Mobilizing Resources, Role Satisfaction, Parent/child interaction, Home Environment and Parenting Efficacy.

The following section describes the results obtained for each subscale of the HFPI. The level of significance is reported along with the *effect size*. An effect size gives a sense of how large the change or improvement is from baseline to 6 months or 12 months. Effect sizes below 0.20 are considered small changes, and those between 0.20 and 0.50 are considered small to medium changes. These findings are based on data reported from the sites and represent participants who completed both instruments at the baseline and 6 month intervals (n=1304) and participants who also had matched instruments at the 12 month interval (n=770).

Healthy Families Parent Inventory (HFPI) Subscales

Exhibit 13. Change in Subscales of the HFPI

Sub- scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Social support	✓	0.000	(0.10)	None	0.261	(0.04)
Problem solving	✓	0.000	(0.24)	✓	0.000	(0.27)
Depression	✓	0.000	(0.12)	✓	0.000	(0.21)
Personal care	✓	0.000	(0.20)	✓	0.000	(0.20)
Mobilizing resources	✓	0.000	(0.35)	✓	0.000	(0.43)
Commitment To Parent Role	✓	0.000	(0.15)	✓	0.000	(0.23)
Parent/child Behavior	✓	0.000	(0.27)	✓	0.016	(0.15)
Home Environment	✓	0.000	(0.31)	✓	0.000	(0.45)
Parenting Efficacy	✓	0.000	(0.22)	✓	0.002	(0.20)



From baseline to 6 months, there were statistically significant changes in all subscales. Consistent with data from last year, significant gains were lost in the area of social support at 12 months. The largest improvements (as shown by the effect sizes) at 6 months after entering the program are in the categories of mobilizing resources (0.35), home environment (0.31), parent/child behavior (0.27), problem solving (0.24), and parenting efficacy (0.22) scales. At 12 months the largest improvements are in home environment (0.45), mobilizing resources (0.43), problem solving (0.27), commitment to parenting role (0.23), and depression (0.21). This indicates that the Healthy Families programs are effective at connecting parents to resources, improving the atmosphere of the home, improving parents' problem solving skills and increasing the parent's self-assessment of parenting efficacy.

Total Change Score on the HFPI

In order to provide a more comprehensive understanding of outcomes in parenting observed during participation in the Healthy Families program, it is also useful to examine the total score on the Healthy Families Parenting Inventory and overall significance of change. As Exhibit 14 below shows, there were significant changes from baseline to 6 months and from baseline to 12 months on the HFPI total scale. This finding supports the conclusion that program participants changed during the course of the program. Overall, approximately two-thirds of parents had positive changes on the total score from baseline to 6 months (66.4%) and from baseline to 12 months (66.6%).

Exhibit 14. Overall Change in Healthy Families Parenting Inventory Outcomes

Sub- scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Total Scale	✓	.000	(0.31)	✓	.000	(0.34)

Child Abuse and Neglect

One of the main goals of Healthy Families Arizona is to reduce the incidence of child maltreatment and abuse. In order to look at child abuse and neglect directly, data from CHILDS, the Arizona Department of Economic Security Child Protective Services data system is used to determine the rates of child abuse and neglect for Healthy Families Arizona participants. It is important to acknowledge that using



official child abuse data as an indicator of program success is complex and is unlikely to fully answer the question about the effectiveness of Healthy Families in preventing child abuse. The shortcomings in using official child abuse rates to assess the effectiveness of home visiting programs have been discussed in numerous journal articles (see for example, *The Future of Children*, 2009).

In 2009 as a result of Legislation, the Substantiation pending adjudication came into process:

CPS proposes to substantiate on dependency cases. An allegation of child abuse or neglect may be substantiated when:

- a dependency petition is filed alleging dependency based upon an allegation of child abuse and/or neglect, and
- the court finds the child dependent based on an allegation of abuse or neglect contained in the petition.

CPS does *not* propose to substantiate *pending dependency adjudication* when a petition is filed based on incorrigibility, delinquency or when a parent's inability to provide services for a child with a disability or chronic illness is solely the result of the unavailability of reasonable services.

There are several reasons the use of child abuse data is believed to have limitations. First, child abuse is an event that occurs infrequently and, therefore, changes are difficult to detect with statistical methods. Second, using official incidents of child abuse and neglect does not necessarily reflect actual behavior—there are many variations in what constitutes abuse and neglect and using only reported and substantiated incidents of abuse captures incidents that rise to that level of severity. Some incidents of child abuse or neglect are undetected or may not meet some definitional standard minimizing the accuracy of the count. Third, using official data requires a process whereby cases are "matched" on available information such as mother's name, social security number, and date of child's birth. When any of this information is missing, the accuracy of the match decreases. Finally, because home visitors are trained in the warning signs of abuse and neglect and are required to report abuse or neglect when it is observed, there is a "surveillance" effect—what might have gone unreported had there been no home visitor shows up in the official data.



In order to best represent families that have received a significant impact from the Healthy Families Arizona program, only families that have been in the program for at least six months are analyzed to determine if they have a substantiated report of child abuse or neglect. This year, 97.9% of the Healthy Families Arizona eligible families (2,055 out of 2,099) were without a substantiated report, as can be seen in Exhibit 15. The program performance goal was set at 99.7% based on the 2006-2007 data. A total of 44 cases were determined to be substantiated reports. A substantiated finding means that "Child Protective Services has concluded that the evidence supports that an incident of abuse or neglect occurred based upon a probable cause standard" (see DES substantiation guidelines for further detail).

Exhibit 15. Percent of Families Showing No Child Abuse and Neglect Incidences – 2007, 2008, 2009, 2010, 2011, 2012

Group	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
	(n = 3,301)	(n = 3,885)	(n = 4,247)	(n = 878)	(n = 1,874)	(n=2,099)
All Families with at least 6 months in the program	99.7%	98.9%	98.8%	97.4%	99.98%	97.9%

Child Development and Wellness

While it is challenging to find ways to accurately measure child abuse and neglect, researchers do point to the benefits and impact that home visitors and home visiting can have on promoting optimal child growth and development in the families served. Home visitors are in a strategic position to help families obtain access to health resources and promote wellness. Immunizations and safety practices in the home are two indicators of child development and wellness reported this year.

Immunizations

The Healthy People 2020 goal is to have at least 90% of all children immunized. Arizona has set an additional standard of 95% of all children within the state under the age of six having received at least one set of vaccinations. As of 2011, the Arizona immunization rate for 24 month olds was 64.4%, and the U.S. rate was 72.8% (www.cdc.gov). The Healthy Families Arizona program supports children obtaining all their necessary immunizations as a key step in preventing debilitating diseases. The home visitors encourage the families to follow through on completing their child's immunizations and ask to check the family's immunization booklet to record the dates of immunizations and assess completion.



Exhibit 16 presents the past three years of data on immunization rates for the 2, 4, 6, and 12 month immunization periods as well as the overall complete immunizations through age 18 months for children. In 2012, there has been an increase from the drop in 2011 in immunization rates among Healthy Families Arizona participants in each time period. However, Healthy Families Arizona families still fell below both the state and national immunization rates for 2-year olds. This is potentially due to the economic factors of prior years and now, where families do not have the resources to visit the doctor regularly. However, the improved rates at the youngest ages suggest that the efforts to increase immunizations in the Healthy Families Arizona program have been successful in this past year.

Exhibit 16. Immunization Rate of Healthy Families Arizona Children

Immunization Period	Percent Immunized 2010	Percent Immunized 2011	Percent Immunized 2012	Immunization Rate for 2-year-olds in
2 month	92.9%	69.7%	93.8%	Arizona
4 month	89.9%	70.2%	87.9%	(2010)*
6 month	74.0%	68.2%	75.6%	(2010)
12 month	85.3%	62.7%	71.3%	
Received all recommended immunization by age 18 months	79.8%	74.4%	67.7%	76.3%

*Source: 2010 data from the CDC National Immunization Survey.

Safety Practices in the Home

A recent study released by the Centers for Disease Control and Prevention (MMWR 2012) states that even though injury death for children have decreased from 15.5 to 11.0 per 100,000 population from 2000 to 2009, they continue to be the leading cause of death for children over the age of 1. Unintentional injuries are also the fifth leading cause of death for newborns and infants under the age of 1. A report in 2004, *Home visiting and childhood injuries*, concluded that home visits can reduce the risk of accidental injuries in the home by approximately 26 percent.

The Healthy Families Arizona home visitors both assess and promote safe environments for children. The home visitors provide education about safety practices and monitoring safety in the home through the completion of the safety checklist with the family. Exhibit 17 reports the use of four key safety practices across five time points for postnatal participants. Families that continue to participate in Healthy Families Arizona see increased safety practices and reach high rates. The National Highway Traffic Safety Administration in 2009 estimated the rate of child



seat use for children under the age of 1 as 98%. The national rate for children between the ages of 1 to 3 however is estimated to be 96%. The families participating in Healthy Families Arizona maintain their high use of car seats overtime, indicating that the message of child safety in cars has been well received. The National Fire Protection Association reports that smoke detectors were present in only 72% of all reported home fires and operated in only 51% of home fires. The high rates of 85% to 91% of Healthy Families Arizona households with working smoke alarms adds to the safety of the household environment for these families. Furthermore, families obtain relatively high rates of covered outlets and poisons locked adding to the overall safety being maintained.

Exhibit 17. Percent of all Families Implementing Safety Practices

	2-Month (n = 2187)	6-Month (n = 1796)	12-Month (n = 1168)	18-Month (n = 727)	24-Month (n = 420)
Outlets Covered	41.8%	54.5%	69.8%	74.1%	74.9%
Poisons Locked	84.7%	91.6%	95.2%	97.0%	96.7%
Smoke Alarms	85.0%	88.2%	90.5%	91.2%	90.5%
Car Seats	99.5%	99.6%	99.7%	99.7%	99.0%

Mothers' Health, Education, and Employment

The Healthy Families Arizona program also attempts to influence maternal life course outcomes. The home visitors encourage families to seek new educational opportunities, complete their high school education, obtain greater economic self-sufficiency, and obtain better paying and better quality jobs. Information is also provided to mothers regarding the positive health impacts of delaying subsequent pregnancies to at least 24 months.

Subsequent Pregnancies and Birth Spacing

Multiple births for some families can lead to increased stress and parenting difficulties, especially if the birth is unwanted or unplanned. Mothers with greater birth spacing have fewer pregnancy complications and are less likely to give birth to low birth weight or premature babies (Kallan, 1997). The home visitors emphasize the benefits of delaying repeat pregnancies and promote longer birth spacing for the mothers in the program. Exhibit 18 shows that the percent of HFAz mothers who reported subsequent pregnancies has increased in 2012 to nearly 8%.



Exhibit 18. Percentage of Mothers who Reported Subsequent Pregnancies State Fiscal Year 2012

	2009	2010	2011	2012
Percent of mothers with subsequent pregnancies	9.9%	7.1%	4.9%	7.9%

In addition to the increase in mothers who have subsequent pregnancies while enrolled in the Healthy Families Arizona program, there is also an unfortunate decrease in the percentage of women waiting at least two years before becoming pregnant again. Exhibit 19 below shows the length of time to subsequent pregnancy for those mothers who do have subsequent births. The low percentage of mothers that wait at least 2 years between subsequent births indicates that the message of delaying subsequent pregnancies is either not being received or embraced.

Exhibit 19. Length of Time to Subsequent Pregnancy for Those Families with Subsequent Births

Length of Time to Subsequent Pregnancy	2009 Percent of Mothers	2010 Percent of Mothers	2011 Percent of Mothers	2012 Percent of Mothers
1 to 12 mos.	49.3%	54.1%	65.1%	59.9%
13 to 24 mos.	46.8%	42.6%	31.0%	37.4%
Over 24 mos.	4.0%	3.3%	3.9%	2.7%

School, Educational Enrollment, and Employment

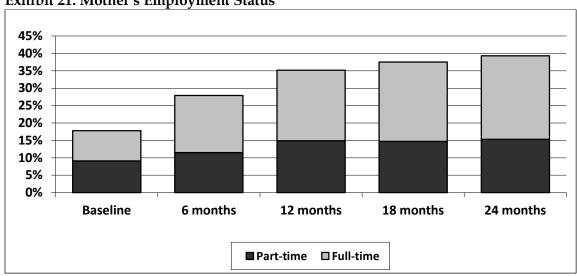
Continued educational obtainment and increased employment are also important to consider when examining the program's potential impact on maternal life course outcomes. Increased education is associated with better overall well-being and greater family stability. As Exhibit 20, at each interval, 15-17% of the mothers are enrolled in school either full- or part-time, this is a decrease from 17-22% in fiscal year 2011. The extended weakened economy may be a relevant factor in the small number enrolled in the past few years. Parents may have additional challenges in accessing or affording childcare, affording school, or having the time available away from work (or seeking employment) to attend school.

Exhibit 20. Percent of Mothers Enrolled in School - State Fiscal Year 2012

	Percent enrolled part-time (2011 prior report)	Percent enrolled full-time (2011 prior report)	Percent enrolled part-time (2012)	Percent enrolled full-time (2012)
6 month	6.1%	10.9%	5.5%	11.0%
12 month	6.3%	11.4%	6.5%	9.9%
18 month	9.3%	12.4%	7.2%	9.6%
24 month	4.8%	12.7%	5.3%	9.3%

Maternal employment shows an increasing rate over time. Just over 39% of the mothers are employed at 24 months. According to the most recent Bureau of Labor Statistics report for 2011, 55.8% of mothers with children less than 1 year of age, and 63.9% of mothers with children less than 6 years of age participate in the labor force. While increasing employment and income is fundamental for family well-being there are complex realities facing families as they begin to increase their earnings. One concern is that as mothers increase their income, there is the potential for families to become ineligible for AHCCCS health insurance and also not be covered by employers. Furthermore, the importance of home visitors working with families in obtaining quality child care is critical given the limited child care options currently available for families with low incomes.

Exhibit 21. Mother's Employment Status



Substance Abuse Screening

The relationship between substance abuse and the potential for child maltreatment is strong and well known (Pan, et al., 1994; Windom, 1992; Wolfe, 1998). When parents or caretakers are abusing substances, children may not be adequately cared for or supervised. While successful substance abuse treatment often requires intensive inpatient or outpatient treatment and counseling, home visitors can still play a critical role in screening for substance abuse, educating families about the effects of substance abuse on their health and the health of their children, and in making referrals for treatment services.

Healthy Families Arizona uses the CRAFFT as a method of screening for substance use and abuse. The CRAFFT is a short screening tool for adults and adolescents to assess high risk drug and alcohol use disorders developed by the Center for Adolescent Substance Abuse Research (CeASAR), at the Children's Hospital of Boston. A positive screen occurs if there are two or more "yes" answers out of six questions and indicates that further assessment and or referrals are recommended.

Exhibit 22 presents data on the percent of families screened with the CRAFFT substance abuse screening tool and the percent of those families who screened positive for drug use. Approximately 45% of families screened at intake assessed positive for a history of substance use putting them at potential risk. The decreased number of families with positive substance abuse screens drops dramatically at 6 months (15%) and continues to drop at 12 months (11%).

Exhibit 22. Percent Screened and Assessed Positive on the CRAFFT

Time at assessment	Percent Screened	Percent Assessed Positive								
2 months (lifetime)	90.1%	45.3%								
6 months	89.7%	14.6%								
12 months	87.5%	11.2%								

Note: The 2 month screen asks lifetime substance use; later screens cover the past 6 months.



2012 Participant Satisfaction Survey

Data on participant satisfaction information provides valuable information for program staff and a time for reflection for participants. If participants are satisfied with the program and the work of the home visitor, they are more likely to benefit from the program. The following data summarizes the responses of participants who took the Healthy Families participant satisfaction survey in Spring 2012.

The survey is distributed to all current participants in the program and returned by mail. A total of 1317 surveys were returned. The ethnic breakdown of these participants was 60% Hispanic, 24% White, 6% American Indian, 5% African American, 4% Two or More Races, 1% Asian, less than 1% Hawaiian/Pacific Islander, and less than 1% Other.

Exhibit 23 below shows key highlights from participant satisfaction survey responses. The exhibit presents the items which received the highest percent of strongly agree responses from participants and the items receiving the lowest percent of strongly agree. Based on the results of the survey it appears that participants feel they have good communication with their home visitors. Fewer participants (74.4%) agree strongly that finding services was easy. For the remaining statements in the satisfaction survey, more than 80% of the respondents strongly agreed. This is similar to the 2011 survey results and indicates a strong satisfaction level with the program.



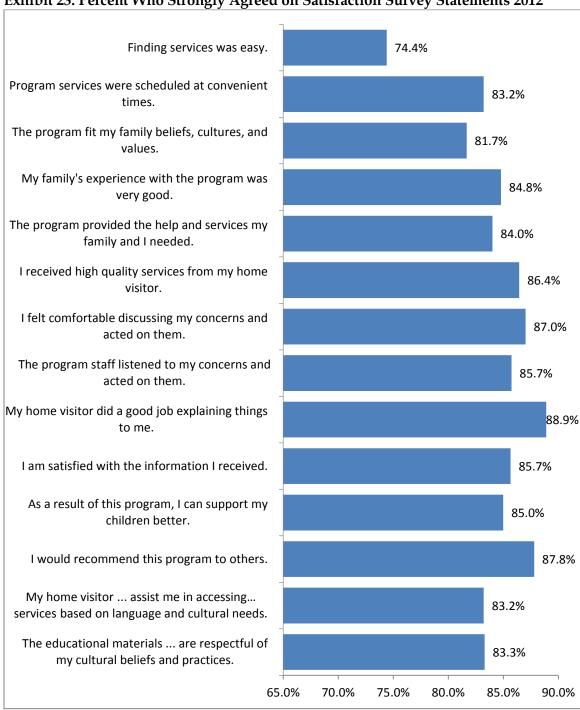


Exhibit 23. Percent Who Strongly Agreed on Satisfaction Survey Statements 2012



Conclusions and Recommendations

The 2012 state fiscal year has been productive for Healthy Families Arizona. The combined funding from the Department of Economic Security, First Things First, and the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) grant has increased the number of families receiving services in more locations throughout the state. The Healthy Families Arizona evaluation report focuses on the following primary outcome indicators: parent outcomes, child health and wellness, and child abuse and neglect. The results from the Healthy Families Parenting Inventory, participant tracking data sheets, safety checklists, screening tools, child abuse and neglect rates, and immunization rates all suggest that the Healthy Families Arizona program continues to address and reach most of its goals.

The Healthy Families Arizona program uses evidence-based methods to guide the practice of home visitation. In order to continue to see successful outcomes and to improve other outcomes, the Healthy Families Arizona program needs to rigorously investigate the program at least annually and use evidence for program improvement.

Recommendations for this year are focused on ways the program can continue to emphasize quality programming, provide the most critical services to the highest risk families, and improve parent and child outcomes.

- Direct additional efforts toward increasing the time between births. This continues to be a concern for the health of the mothers in the Healthy Families Arizona program. There continues to be an increase in the percentage of subsequent pregnancies that are happening within 24 months of a prior birth. Additional training for Family Support Specialists and creative strategies to educate parents on the benefits of delayed pregnancy should be undertaken. One possibility is to conduct a pilot effort in one or two sites using additional training and educational materials to determine if this increases the time between births.
- Place additional emphasis on maternal educational attainment. Forty-four percent of mothers have less than a high school education at enrollment. Less than 20% of mothers are enrolled in educational programs at any specific data collection time point. Maternal educational attainment should be encouraged by the Family Support Specialists. Programs may want to find resources in their local areas to provide information and referrals to the mothers regarding educational opportunities.



- Maintain attention to recruiting and serving families during the prenatal period. Families that are enrolled during the prenatal period continue to have better birth outcomes than those that have not received Healthy Families Arizona services prior to birth. It is suggested, that the programs consider emphasizing enrollment efforts for families in the prenatal period. These strategies may need to be customized to the local community in order to most effectively reach families in the prenatal period.
- Use the Site Profiles provided to the sites at the local level. The Site Profiles include the basic demographic information of the families served by each site that were included in the Annual Evaluation Report. These are the families that were actively engaged in receiving the Healthy Families Arizona program. The data can be used by the sites to share with board members, city councils, and other key stakeholders to emphasize the good work being done by the program and the needs of the families.
- elements of the program logic model to sharpen focus on key program objectives and activities. Healthy Families Arizona developed comprehensive logic models for both the prenatal program and the postnatal program, to illustrate the key goals, objectives, activities, outputs, outcomes, and evaluation methods. Although many of the critical elements remain unchanged, it would be useful to re-examine if the models are depicting the program as currently implemented. These logic models can be distributed and used by all program staff to maintain focus on key aspects of the intervention model. Training for program staff can support the use of the logic model to maintain sharp focus on fidelity to the model.
- Place increased focus on assuring timely immunizations and full immunization. While there has been an increase in the number of infants completing their immunizations at each time point this year compared to last year, the percent of 18 to 24 month olds with completed series of vaccinations has dropped. While this may be partially due to the continued economic situation where families are unable to obtain immunizations easily due to clinic closures, lack of transportation, and other reasons, it remains essential to the health of the

child that immunizations be completed. The Family Support Specialists may need to place more emphasis on the importance of immunizations and may need to make additional referrals to local immunization clinics.

Continue to develop the Healthy Families system using "evidence-based" strategies to improve outcomes. Ongoing training and quality assurance efforts for Healthy Families should focus on using strategies that are evidence-based. Further, ongoing data collection, for example with the HFPI should be used for data-based decision making by selecting interventions and curriculum activities based on information obtained from assessment instruments like the HFPI. Ongoing use of evidence-based protocols can increase the effectiveness of the program.

References

Ahrens, Marty (2011). Smoke Alarms in U.S. Home Fires, *National Fire Protection Association Fire Analysis and Research*, Quincy, MA. September 2011.

Barth, R.P. (1991). An experimental evaluation of in-home child abuse prevention services. *Child Abuse & Neglect*, 15, 363-375.

Barth, R. (1999). Preventing child abuse and neglect with parent training: Evidence and opportunities. The Future of Children, 19, 95–118.

Daro, D. (2009). Embedding home visitation programs within a system of early childhood services. *Chapin Hall Issue Brief*, September 2009.

Gessner, B.D. (2008). The effect of Alaska's home visitation program for high-risk families on trends in abuse and neglect. *Child Abuse & Neglect*, 32, 317–333.

Glascoe FP, Dworkin PH. (1993). Obstacles to effective developmental surveillance: errors in clinical reasoning. *J Dev Behav Pediatr*. Oct;14(5):344-9.

Glassbrenner D. and Ye, J. (2007) Rear-seat belt use in 2006. Traffic Safety Facts Research Note. Report no. DOT HS-810-765. Washington, DC: National Highway Traffic Safety Administration.

Gomby, D. (2005). Home Visitation in 2005: Outcomes for Children and Parents. Invest in Kids Working Paper No.7. Committee for Economic Development: Invest in Kids Working Group. July. Available at www.ced.org/projects/kids.shtm.

Gray, J. A. M. (2001). The origin of evidence-based practice. In A. Edwards & G. Elwyn (Eds.), *Evidence-informed client choice* (pp. 19-33). New York: Oxford University Press.

Haskins, R., Paxson, C., & Brooks-Gunn, J. (2009) Social Science Rising: A Tale of Evidence Shaping Policy. The Future of Children Policy Brief, October 01, 2009.

Howard, K., and Brooks-Gunn, J. (2009). The role of home-visiting programs in preventing child abuse and neglect. The Future of Children, 19,119-146.

Jacobs, F., Easterbrooks, M. A., Brady, A., & Mistry, J. (2005). *Healthy Families Massachusetts: Final Evaluation Report*. Tufts University.

Kallan, J. E. (1997). Reexamination of interpregnancy intervals and subsequent birth outcomes: Evidence from U. S. linked birth/infant death records. *Social Biology*, 44, 205-212.



Krysik, J., & LeCroy, C. W. (2012). Development and initial validation of an outcome measure for home visitation: The Healthy Families Parenting Inventory. *Infant Mental Health Journal*, 33, 496-505.

Kitzman, H. J., Cole, R., Yoos, H. L., & Olds, D. L. (1997). Challenges experienced by home visitors: A qualitative study of program implementation. *Journal of Community Psychology* 26, 95-109.

LeCroy, C. W. & Krysik, J. (2011). Randomized trial of the healthy families Arizona home visiting program. *Children and Youth Services Review*, *33*, 1761-1766.

LeCroy, C. W., & Krysik, J. (2010). Measurement issues in home visitation: A research note. *Children and Youth Services Review*, *32*, 1483-1486.

LeCroy, C. W., Krysik, J., & Milligan, K. (2007). The healthy families parenting inventory. In K. Corcoran & J. Fischer (eds.). *Measures for Clinical Practice* (pp. 344-348). New York: Oxford University Press.

LeCroy, C.W. & Whitaker, K. (2005). Improving the quality of home visitation: An exploratory study of difficult situations. *Child Abuse and Neglect*, 29, 1003-1013.

LeCroy & Milligan Associates. (2008). Healthy Families Arizona Annual Evaluation Report 2008. Tucson, AZ: LeCroy & Milligan Associates, Inc.

LeCroy & Milligan Associates (2011). Annual Report, Randomized study of the Healthy Families Arizona program. Children's Bureau. Washington DC.

Liabo, K., & Lucas, P. (2004). Home visiting and childhood injuries. Highlight no. 213, National Children's Bureau, What works for children. York, UK.

Macdonald, G., et al. (2007). Home-based support for disadvantaged teenage mothers. *Cochrane Database Syst Rev*, 18 (3).

McCurdy, K., Hurvis, S., & Clark, J. (1996). Engaging and retaining families in child abuse prevention programs. *The APSAC Advisor*, 9, 3–8.

McDonald Culp, A., Hechtner-Galvin, T., Howell, C.S., Saathoff-Wells, T., & Marr, P. (2003). First-time mothers in home visitation services utilizing child development specialists. *Infant Mental Health Journal*, 25, 1-15

Mitchell-Herzfeld, Susan, Charles Izzo, Rose Greene, Eunju Lee, and Ann Lowenfels, *Evaluation of Healthy Families New York (HFNY): First Year Program Impact* (2005)., Rensselaer, N.Y.: New York State Office of Children and Family Services, Bureau of Evaluation and Research; Albany, N.Y.: Center for Human Services Research, University at Albany, February 2005.



Morbidity and Mortality Weekly Report (MMWR) (2012) *Vital Signs: Unintentional Injury Deaths Among Persons Aged 0 – 19 Years – United States, 2000 – 2009.* Centers for Disease Control and Prevention MMWR, April 16, 2012: 1 – 7.

National Highway Traffic Safety Administration (2009) Traffic Safety Facts Research Note June 2009, DOT HS 811 148. NHTSA National Center for Statistics and Analysis. Washington, DC.

Olds, D. L., & Korfmacher, J. (1998). Maternal psychological characteristics as influences on home visitation contact. *Journal of Community Psychology*, 26,23-36.

Olds, D., Robinson, J., O'Brien, R., Luckey, D.W., Pettitt, L.M., Henderson, C.R., et al. (2002). Home visiting by paraprofessionals and by nurses: A randomized controlled trial. *Pediatrics*, 110(3), 486-496.

Olds et al. (2004a.). Olds, D., Kitzman, H., Cole, R. and others. Effects of Nurse Home-Visiting on Maternal Life Course and Child Development: Age 6 Follow-Up Results of a Randomized Trial. *Pediatrics* 114, 1550-1559.

Olds et al. (2004b.). Olds, D., Robinson, J., Pettitt, L., and others. Effects of Home Visits by Paraprofessionals and by Nurses: Age 4 Follow-Up Results of a Randomized Trial. *Pediatrics* 114 (2004): 1560-1568.

Pan, H. S., Neidig, P. H., & O'Leary, K. D. (1994). Predicting mild and severe husband to wife physical aggression. *Journal of Consulting and Clinical Psychology*, 62, 975-981.

Prevent Child Abuse America (2012) 2011 Annual Report: Prevention is Possible: How We All Play A Role in the Lives of Children. Retrieved online at www.preventchildabuse.org/about_us/downloads/annual_report_2011.pdf

Rowland, D., DiGuiseppi, C., Roberts, I., Curtis, K., Roberts, H., Ginnelly, L., Sculpher, M., & Wade, A. (2002). Prevalence of working smoke alarms in local authority inner city housing: randomized controlled trial. *BMJ*, 325, pp. 998-1001.

Sackett, D. L., Strauss, S. E., Richardson, W. C., Rosenberg, W., & Haynes, R. (2000). *Evidence-based medicine: How to practice and teach EBM*. New York: Churchill Livingstone.

Tait, V. F. (2009). The AAP's developmental screening initiatives & the Medical Home. In *Developmental Screening in Early Childhood Systems: Summary Report*. Elk Grove, IL: Healthy Child Care America: A Program of the American Academy of Pediatrics.

Taylor, D. K., & Beauchamp, C. (1988). Hospital-based primary prevention strategy in child abuse: A multi-level needs assessment. *Child Abuse & Neglect*, 12, 343–354.



U.S. Department of Health and Human Services (2010a). Child Maltreatment: 2008. Retrieved from http://www.acf.hhs.gov/programs/cb/stats_research/index.htm#can.

U.S. Department of Health and Human Services (2010b). HHS Allocated \$88 Million for Home Visiting Program to Improve the Wellbeing of Children and Families. News Release. Retrieved online at www.hhs.gov/news/press/2010pres/07/20100721a.htm

Windom, C. S. (1992). Child abuse and alcohol use. Paper presented to the National Institute on Alcohol Abuse and Alcoholism, Washington DC.

Wolfe, D. A. (1998). Prevention of child abuse and neglect. *Canada health action: Building on the legacy – Determinants of health, Vol. I-Children and youth* (pp. 103-131). Ste Foy, Multimondes.



Appendix A. Site Level Data

• Age of Child at Entry by Site	48
Days to Program Exit by Site	49
Top Four Reasons for Program Exit by Site	50
Health Insurance at Intake by Site	51
• Late or No Prenatal Care or Poor Compliance at <u>Intake</u> by Site	52
Ethnicity of Mother by Site Prenatal	53
Ethnicity of Mother by Site Postnatal	54
●Gestational Age by Site	55
● Low Birth Weight by Site	56
Yearly Income by Site	57
Mother's Parent Survey Score by Site	58
• Trimester of Enrollment into Prenatal Program by Site	59
• Engaged Prenatal Families that Exited before Baby's Birth by Site	60

Age of Child at Entry by Site - 2012 (Age in Days)

(.		Standard	
Site	Mean (Age in Days)	Number	Deviation
Central Phoenix	44.46	71	21.76
Maryvale	43.32	90	25.53
East Valley	42.35	68	25.17
Nogales	12.13	30	19.66
Page	9.00	3	5.57
Pima-Team 8	28.47	59	22.08
Pima-Team 9	27.43	72	21.60
Pima-Team 10	29.27	45	22.56
Pima-Team 11	31.56	86	25.09
Douglas / Sierra Vista	21.44	41	38.60
Tuba City	14.83	35	31.69
Yuma #15	17.18	62	16.22
Lake Havasu	21.09	47	24.43
Flagstaff #1	39.05	20	34.14
Sunnyslope	44.55	104	30.22
Prescott	18.20	81	16.07
Mesa	49.95	91	24.97
Pima- Team 27	33.55	44	20.93
Safford	24.52	23	36.61
Winslow	12.26	23	29.61
Kingman	24.10	31	29.57
Bullhead City	28.95	73	32.15
West Phoenix	37.90	88	25.16
Flagstaff #2	34.40	10	26.29
Central Phoenix #1	38.33	60	24.62
Central Phoenix #2	43.95	74	33.03
North Phoenix	40.37	59	23.87
SE/NE Maricopa	54.94	66	106.18
Combo Phoenix	35.77	61	24.89
South Phoenix	46.39	44	25.59
SE Maricopa #7	36.29	58	46.71
SE Maricopa #8	29.26	77	22.31
Yuma #70	19.17	78	17.56
Total	33.83	1874	34.29

Note: total does not include data for families that enrolled in the prenatal period including those that did not receive prenatal services.



Days to Program Exit by Site - 2012 (For families who left the program)

			renatal	ere tric pro	55.4)	Po	stnatal	
Site	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Central Phoenix	261.00	337.00	317.30	7	356.00	444.41	282.70	29
Maryvale	777.00	568.57	342.50	7	196.00	284.43	213.10	37
East Valley	570.50	503.90	237.74	10	307.00	376.69	252.58	16
Nogales	282.00	282.00	135.76	2	229.00	333.58	237.73	12
Page	671.00	671.00	222.03	2	426.00	426.00	-	1
Pima-Team 8	214.50	322.10	274.63	10	255.00	298.35	170.80	20
Pima-Team 9	596.50	631.83	409.42	6	339.00	388.00	217.15	29
Pima-Team 10	289.00	439.33	435.42	3	347.50	574.25	390.44	8
Pima-Team 11	323.00	277.67	78.52	3	250.00	346.45	219.30	31
Douglas / Sierra Vista	485.00	445.60	158.78	5	378.00	405.28	211.51	18
Tuba City	216.00	386.80	351.50	5	234.00	258.73	81.22	11
Yuma #15	376.00	308.60	208.58	5	365.00	371.67	261.56	12
Lake Havasu	339.00	372.87	260.66	15	311.00	354.30	223.36	30
Flagstaff #1	345.00	426.44	217.61	9	176.50	308.50	270.62	8
Sunnyslope	161.00	232.78	187.20	9	405.00	404.51	225.41	41
Prescott	721.00	645.00	186.97	3	358.50	385.67	242.00	36
Mesa	281.50	264.50	142.49	8	305.00	342.84	224.29	38
Pima- Team 27	627.00	545.33	292.95	6	277.00	334.29	176.71	28
Safford	-	-	-	0	255.00	291.43	162.94	7
Winslow	382.00	362.50	168.18	4	229.00	296.77	183.63	13
Kingman	248.00	294.32	254.56	22	177.00	295.69	240.69	13
Bullhead City	439.00	480.29	280.18	7	276.00	339.31	226.44	35
West Phoenix	206.00	307.89	205.46	9	238.00	342.08	253.74	25
Flagstaff #2	693.50	694.83	129.97	6	283.00	345.33	187.77	6
Central Phoenix #1	305.00	423.00	286.99	7	276.50	301.00	198.74	26
Central Phoenix #2	250.00	278.53	144.42	15	305.00	346.38	189.74	26
North Phoenix	226.00	293.24	232.37	21	382.00	443.69	277.76	51
SE/NE Maricopa	226.50	301.33	177.53	12	179.00	216.14	140.00	35
Combo Phoenix	209.00	253.73	189.48	15	305.00	336.00	216.16	22
South Phoenix	292.00	344.25	133.89	8	276.00	338.41	224.60	37
SE Maricopa #7	288.00	298.83	136.03	6	345.00	392.84	221.46	25
SE Maricopa #8	274.00	304.83	128.51	6	315.00	356.00	228.52	31
Yuma #70	234.50	284.75	144.99	4	212.50	235.46	91.63	24
Total	292.00	363.67	246.86	257	283.00	349.25	226.29	779

Top Four Reasons for Program Exit by Site - 2012 Percent and number within site

		Overal	1 (Prena	tal and	Postna	tal Con	ibined)	
	#1 M		#2 Fan			d Not		Self
		vay	Refuse	9		ond to		ciency
Site	120049		Further		_	each	Julia	cicicy
Site					Efforts			
			Services		EHOITS			
	0.4		0.4		0.4		0.4	
	%	n	%	n	%	n	%	n
Central Phoenix	9.1	8	3.4	3	5.7	5	10.2	9
Maryvale	4.6	5	10.1	11	3.7	4	3.7	4
East Valley	5.3	5	1.1	1	5.3	5	5.3	5
Nogales	14.6	6	9.8	4	4.9	2	0.0	0
Page	12.5	1	12.5	1	0.0	0	0.0	0
Pima-Team 8	6.1	5	1.2	1	14.6	12	0.0	0
Pima-Team 9	5.4	5	10.9	10	12.0	11	1.1	1
Pima-Team 10	4.8	3	1.6	1	0.0	0	3.2	2
Pima-Team 11	7.1	7	11.2	11	6.1	6	2.0	2
Douglas / Sierra Vista	14.6	7	4.2	2	18.8	9	0.0	0
Tuba City	9.3	5	9.3	5	7.4	4	0.0	0
Yuma #15	15.0	12	1.2	1	2.5	2	1.2	1
Lake Havasu	16.4	12	4.1	3	9.6	7	13.7	10
Flagstaff #1	11.5	6	11.5	6	0.0	0	3.8	2
Sunnyslope	6.7	8	9.2	11	9.2	11	9.2	11
Prescott	13.8	12	11.5	10	8.0	7	2.3	2
Mesa	7.1	8	7.1	8	10.6	12	2.7	3
Pima- Team 27	9.6	5	13.5	7	11.5	6	7.7	4
Safford	10.3	3	3.4	1	3.4	1	0.0	0
Winslow	16.7	6	2.8	1	11.1	4	11.1	4
Kingman	18.4	14	13.2	10	0.0	0	2.6	2
Bullhead City	17.9	17	7.4	7	5.3	5	3.2	3
West Phoenix	6.2	7	3.5	4	6.2	7	7.1	8
Flagstaff #2	31.6	6	0.0	0	5.3	1	0.0	0
Central Phoenix #1	3.7	3	12.2	10	9.8	8	1.2	1
Central Phoenix #2	9.4	10	3.8	4	4.7	5	2.8	3
North Phoenix	9.8	8	7.3	6	8.5	7	4.9	4
SE/NE Maricopa	13.5	12	7.9	7	4.5	4	16.9	15
Combo Phoenix	11.4	10	10.2	9	6.8	6	4.5	4
South Phoenix	5.7	3	24.5	13	20.8	11	0.0	0
SE Maricopa #7	7.9	6	2.6	2	2.6	2	15.8	12
SE Maricopa #8	2.1	2	20.0	19	4.2	4	6.3	6
Yuma #70	9.4	8	7.1	6	5.9	5	8.2	7
Total	9.5	235	7.9	195	7.0	173	5.0	125



Health Insurance at Intake by Site – 2012 Percent and number within Site*

			PRENA	TAL					POSTN	ATAL		
Site	No	ne	AHC	CCS	Priv	ate	No	ne	AHC	CCS	Priv	ate
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	5.9	1	88.2	15	5.9	1	5.6	4	88.7	63	5.6	4
Maryvale	5.3	1	89.5	17	5.3	1	4.5	4	92.1	82	3.4	3
East Valley	14.8	4	70.4	19	7.4	2	7.5	5	83.6	56	9.0	6
Nogales	0.0	0	100	9	0.0	0	6.7	2	90.0	27	3.3	1
Page	0.0	0	80.0	4	20.0	1	0.0	0	100	3	0.0	0
Pima-Team 8	9.1	2	81.8	18	9.1	2	1.8	1	84.2	48	10.5	6
Pima-Team 9	0.0	0	84.2	16	10.5	2	2.8	2	88.7	63	8.5	6
Pima-Team 10	6.2	1	87.5	14	6.2	1	2.3	1	95.5	42	2.3	1
Pima-Team 11	0.0	0	90.9	10	9.1	1	3.5	3	83.5	71	12.9	11
Douglas / Sierra Vista	16.7	1	83.3	5	0.0	0	0.0	0	85.4	35	12.2	5
Tuba City	5.9	1	88.2	15	0.0	0	0.0	0	97.1	34	2.9	1
Yuma #15	11.1	2	77.8	14	0.0	0	3.4	2	96.6	57	0.0	0
Lake Havasu	3.8	1	88.5	23	7.7	2	4.3	2	89.1	41	2.2	1
Flagstaff #1	3.1	1	87.5	28	9.4	3	5.0	1	90.0	18	5.0	1
Sunnyslope	0.0	0	100	15	0.0	0	3.8	4	89.4	93	6.7	7
Prescott	20.1	1	80.0	4	0.0	0	5.0	4	80.0	64	13.8	11
Mesa	9.1	2	90.9	20	0.0	0	6.6	6	82.4	75	11.0	10
Pima- Team 27	0.0	0	100	8	0.0	0	2.3	1	90.9	40	4.5	2
Safford	0.0	0	100	6	0.0	0	4.3	1	82.6	19	13.0	3
Winslow	0.0	0	100	12	0.0	0	4.3	1	91.3	21	0.0	0
Kingman	11.4	5	65.9	29	22.7	10	6.5	2	83.9	26	9.7	3
Bullhead City	9.5	2	90.5	19	0.0	0	1.4	1	91.8	67	6.8	5
West Phoenix	0.0	0	88.0	22	4.0	1	6.8	6	89.8	79	3.4	3
Flagstaff #2	0.0	0	100	9	0.0	0	10.0	1	90.0	9	0.0	0
Central Phoenix #1	9.1	2	90.9	20	0.0	0	3.4	2	93.2	55	1.7	1
Central Phoenix #2	9.7	3	87.1	27	0.0	0	8.1	6	86.5	64	5.4	4
North Phoenix	13.0	3	78.3	18	8.7	2	3.4	2	91.5	54	3.4	2
SE/NE Maricopa	8.7	2	69.6	16	21.7	5	7.6	5	80.3	53	12.1	8
Combo Phoenix	3.7	1	85.2	23	7.4	2	3.3	2	86.9	53	8.2	5
South Phoenix	0.0	0	100	9	0.0	0	4.5	2	88.6	39	6.8	3
SE Maricopa #7	11.1	2	77.8	14	11.1	2	5.2	3	79.3	46	15.5	9
SE Maricopa #8	5.6	1	77.8	14	11.1	2	5.2	4	92.2	71	2.6	2
Yuma #70	0.0	0	100	7	0.0	0	4.0	3	94.7	71	1.3	1
Total	6.6	39	84.7	499	6.8	40	4.5	83	88.2	1639	6.7	125

^{*&}quot;Other" insurance percentages are not listed in this table but can be estimated by subtracting the sum of the other insurance categories from 100.



Late or No Prenatal Care or Poor Compliance at <u>Intake</u> 2012 by Site

Percent and number () within Site

Did the mother have late or no prenatal care or poor compliance with prenatal care?

		PRENATAL	,		POSTNATAL	ı
Site	Yes	No	Unknown	Yes	No	Unknown
Central Phoenix	35.3% (6)	64.7% (1)	0.0% (0)	36.6% (26)	62.0% (44)	1.4% (1)
Maryvale	31.6% (6)	68.4% (13)	0.0% (0)	40.0% (36)	60.0% (54)	0.0% (0)
East Valley	14.8% (4)	85.2% (23)	0.0% (0)	45.6% (31)	54.4% (34)	0.0% (0)
Nogales	22.2% (2)	77.8% (7)	0.0% (0)	31.0% (9)	62.1% (18)	6.9% (2)
Page	20.0% (1)	80.0% (4)	0.0% (0)	66.7% (2)	33.3% (1)	0.0% (0)
Pima-Team 8	22.7% (5)	77.3% (17)	0.0% (0)	25.4% (15)	74.6% (44)	0.0% (0)
Pima-Team 9	15.0% (3)	85.0% (17)	0.0% (0)	22.2% (16)	77.8% (56)	0.0% (0)
Pima-Team 10	29.4% (5)	70.6% (12)	0.0% (0)	24.4% (11)	75.6% (34)	0.0% (0)
Pima-Team 11	25.0% (3)	75.0% (9)	0.0% (0)	22.1% (19)	77.9% (67)	0.0% (0)
Douglas / Sierra Vista	14.3% (1)	85.7% (6)	0.0% (0)	24.4% (10)	75.6% (34)	0.0% (0)
Tuba City	26.3% (5)	73.7% (14)	0.0% (0)	28.6% (10)	62.9% (22)	8.6% (3)
Yuma #15	50.0% (9)	50.0% (9)	0.0% (0)	43.5% (27)	56.5% (35)	0.0% (0)
Lake Havasu	11.5% (3)	76.9% (20)	11.5% (3)	19.1% (9)	66.0% (31)	14.9% (7)
Flagstaff #1	16.1% (5)	83.9% (26)	0.0% (0)	10.0% (2)	85.0% (17)	5.0% (1)
Sunnyslope	13.3% (2)	86.7% (13)	0.0% (0)	27.2% (28)	72.8% (75)	0.0% (0)
Prescott	20.0% (1)	60.0% (3)	20.0% (1)	55.7% (44)	43.0% (34)	1.3% (1)
Mesa	31.8% (7)	68.2% (15)	0.0% (0)	38.5% (35)	61.5% (56)	0.0% (0)
Pima- Team 27	12.5% (1)	87.5% (7)	0.0% (0)	22.7% (10)	77.3% (34)	0.0% (0)
Safford	33.3% (2)	66.7% (4)	0.0% (0)	4.3% (1)	73.9% (17)	21.7% (5)
Winslow	30.8% (4)	69.2% (9)	0.0% (0)	17.4% (4)	82.6% (19)	0.0% (0)
Kingman	13.3% (6)	80.0% (36)	6.7% (3)	29.0% (9)	71.0% (22)	0.0% (0)
Bullhead City	40.0% (8)	55.0% (11)	5.0% (1)	42.5% (31)	54.8% (40)	2.7% (2)
West Phoenix	20.0% (5)	80.0% (20)	0.0% (0)	28.4% (25)	71.6% (63)	0.0% (0)
Flagstaff #2	22.2% (2)	77.8% (7)	0.0% (0)	40.0% (4)	60.0% (6)	0.0% (0)
Central Phoenix #1	28.6% (6)	71.4% (15)	0.0% (0)	41.7% (25)	58.3% (35)	0.0% (0)
Central Phoenix #2	21.9% (7)	78.1% (25)	0.0% (0)	34.2% (25)	63.0% (46)	2.7% (2)
North Phoenix	26.1% (6)	73.9% (17)	0.0% (0)	40.7% (24)	59.3% (35)	0.0% (0)
SE/NE Maricopa	21.7% (5)	78.3% (18)	0.0% (0)	25.8% (17)	74.2% (49)	0.0% (0)
Combo Phoenix	18.5% (5)	81.5% (22)	0.0% (0)	42.6% (26)	57.4% (35)	0.0% (0)
South Phoenix	33.3% (3)	66.7% (6)	0.0% (0)	25.0% (11)	75.0% (33)	0.0% (0)
SE Maricopa #7	29.4% (5)	70.6% (12)	0.0% (0)	29.3% (17)	70.7% (41)	0.0% (0)
SE Maricopa #8	35.3% (6)	64.7% (11)	0.0% (0)	41.6% (32)	57.1% (44)	1.3% (1)
Yuma #70	42.9% (3)	57.1% (4)	0.0% (0)	38.5% (30)	61.5% (48)	0.0% (0)
Total	23.9%	74.7%	1.3%	33.2%	65.4%	1.3%
	(142)	(443)	(8)	(621)	(1223)	(25)



Ethnicity of Mother by Site <u>PRENATAL</u> - 2012 Percent and number within Site

Site	Caucas	sian/	His	panic	Afric	can	Asia	an	Nati	ive	Mix	ed/
	Whi	te			Amer	ican	Amer	ican	Amer	ican	Oth	ner
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	5.9	1	70.6	12	17.6	3	0.0	0	5.9	1	0.0	0
Maryvale	27.8	5	50.0	9	16.7	3	0.0	0	0.0	0	5.6	1
East Valley	33.3	9	40.7	11	14.8	4	0.0	0	7.4	2	3.7	1
Nogales	11.1	1	88.9	8	0.0	0	0.0	0	0.0	0	0.0	0
Page	0.0	0	0.0	0	0.0	0	0.0	0	100	5	0.0	0
Pima-Team 8	21.1	4	68.4	13	5.3	1	0.0	0	5.3	1	0.0	0
Pima-Team 9	30.0	6	55.0	11	0.0	0	5.0	1	10.0	2	0.0	0
Pima-Team 10	5.9	1	88.2	15	5.9	1	0.0	0	0.0	0	0.0	0
Pima-Team 11	33.3	4	66.7	8	0.0	0	0.0	0	0.0	0	0.0	0
Douglas / Sierra Vista	14.3	1	85.7	6	0.0	0	0.0	0	0.0	0	0.0	0
Tuba City	0.0	0	0.0	0	0.0	0	0.0	0	100	19	0.0	0
Yuma #15	11.1	2	77.8	14	5.6	1	0.0	0	5.6	1	0.0	0
Lake Havasu	73.1	19	19.2	5	0.0	0	7.7	2	0.0	0	0.0	0
Flagstaff #1	22.6	7	54.8	17	0.0	0	0.0	0	22.6	7	0.0	0
Sunnyslope	61.5	8	38.5	5	0.0	0	0.0	0	0.0	0	0.0	0
Prescott	33.3	2	66.7	4	0.0	0	0.0	0	0.0	0	0.0	0
Mesa	21.1	4	73.7	14	5.3	1	0.0	0	0.0	0	0.0	0
Pima- Team 27	50.0	4	25.0	2	0.0	0	0.0	0	25.0	2	0.0	0
Safford	33.3	2	66.7	4	0.0	0	0.0	0	0.0	0	0.0	0
Winslow	23.1	3	23.1	3	0.0	0	0.0	0	53.8	7	0.0	0
Kingman	89.2	33	5.4	2	0.0	0	2.7	1	2.7	1	0.0	0
Bullhead City	72.7	16	13.6	3	9.1	2	0.0	0	0.0	0	4.5	1
West Phoenix	20.0	5	64.0	16	12.0	3	0.0	0	0.0	0	4.0	1
Flagstaff #2	0.0	0	55.6	5	0.0	0	0.0	0	44.4	4	0.0	0
Central Phoenix #1	13.6	3	59.1	13	22.7	5	0.0	0	0.0	0	4.5	1
Central Phoenix #2	18.8	6	50.0	16	25.0	8	3.1	1	3.1	1	0.0	0
North Phoenix	42.1	8	47.4	9	10.5	2	0.0	0	0.0	0	0.0	0
SE/NE Maricopa	40.9	9	36.4	8	22.7	5	0.0	0	0.0	0	0.0	0
Combo Phoenix	24.0	6	48.0	12	16.0	4	0.0	0	12.0	3	0.0	0
South Phoenix	11.1	1	88.9	8	0.0	0	0.0	0	0.0	0	0.0	0
SE Maricopa #7	44.8	4	50.0	9	0.0	0	0.0	0	0.0	0	5.6	1
SE Maricopa #8	50.0	9	38.9	7	5.6	1	5.6	1	0.0	0	0.0	0
Yuma #70	0.0	0	85.7	6	0.0	0	0.0	0	14.3	1	0.0	0
Total	32.5	187	47.8	275	7.7	44	1.0	6	9.9	57	1.0	6



Ethnicity of Mother by Site <u>POSTNATAL</u> - 2012 Percent and number within Site

Site	Caucas	sian/	His	oanic	Afric	can	Asia	an	Nati	ive	Mix	ed/
	Whi	te			Amer	ican	Amer	ican	Amer	ican	Oth	ıer
	%	n	%	n	%	n	%	n	%	n	%	n
Central Phoenix	28.6	20	52.9	37	11.4	8	0.0	0	7.1	5	0.0	0
Maryvale	11.8	10	78.8	67	7.1	6	1.2	1	1.2	1	0.0	0
East Valley	18.2	12	69.7	46	7.6	5	1.5	1	1.5	1	1.5	1
Nogales	0.0	0	100	30	0.0	0	0.0	0	0.0	0	0.0	0
Page	0.0	0	0.0	0	0.0	0	0.0	0	100	3	0.0	0
Pima-Team 8	15.3	9	81.4	48	1.7	1	0.0	0	1.7	1	0.0	0
Pima-Team 9	29.2	21	68.1	49	1.4	1	0.0	0	1.4	1	0.0	0
Pima-Team 10	6.8	3	75.0	33	4.5	2	4.5	2	6.8	3	2.3	1
Pima-Team 11	32.5	27	48.2	40	8.4	7	4.8	4	4.8	4	1.2	1
Douglas / Sierra Vista	36.6	15	53.7	22	2.4	1	2.4	1	2.4	1	2.4	1
Tuba City	0.0	0	0.0	0	0.0	0	0.0	0	100	35	0.0	0
Yuma #15	3.2	2	96.8	60	0.0	0	0.0	0	0.0	0	0.0	0
Lake Havasu	63.0	29	30.4	14	2.2	1	0.0	0	4.3	2	0.0	0
Flagstaff #1	20.0	4	60.0	12	5.0	1	0.0	0	15.0	3	0.0	0
Sunnyslope	38.5	40	49.0	51	9.6	10	0.0	0	2.9	3	0.0	0
Prescott	71.2	57	22.5	18	0.0	0	2.5	2	2.5	2	1.2	1
Mesa	28.9	26	54.4	49	5.6	5	1.1	1	8.9	8	1.1	1
Pima- Team 27	35.7	15	50.0	21	9.5	4	2.4	1	2.4	1	0.0	0
Safford	52.2	12	47.8	11	0.0	0	0.0	0	0.0	0	0.0	0
Winslow	17.4	4	8.7	2	0.0	0	0.0	0	65.2	15	8.7	2
Kingman	76.7	23	16.7	5	3.3	1	0.0	0	3.3	1	0.0	0
Bullhead City	74.0	54	19.2	14	2.7	2	1.4	1	1.4	1	1.4	1
West Phoenix	15.9	14	69.3	61	10.2	9	0.0	0	2.3	2	2.3	2
Flagstaff #2	10.0	1	30.0	3	0.0	0	0.0	0	60.0	6	0.0	0
Central Phoenix #1	24.1	14	65.5	38	3.4	2	0.0	0	5.2	3	1.7	1
Central Phoenix #2	11.3	8	62.0	44	16.9	12	1.4	1	7.0	5	1.4	1
North Phoenix	38.6	22	47.4	27	3.5	2	5.3	3	5.3	3	0.0	0
SE/NE Maricopa	42.9	27	46.0	29	3.2	2	3.2	2	3.2	2	1.6	1
Combo Phoenix	28.8	17	54.2	32	6.8	4	1.7	1	8.5	5	0.0	0
South Phoenix	4.5	2	84.1	37	11.4	5	0.0	0	0.0	0	0.0	0
SE Maricopa #7	39.3	22	50.0	28	8.9	5	0.0	0	1.8	1	0.0	0
SE Maricopa #8	23.7	18	68.4	52	1.3	1	0.0	0	6.6	5	0.0	0
Yuma #70	15.8	12	80.3	61	3.9	3	0.0	0	0.0	0	0.0	0
Total	29.4	540	56.6	1041	5.4	100	1.1	21	6.7	123	0.8	14



Gestational Age by Site - 2012 (Number and Percent within Site)

Was the gestational age less than 37 weeks?

		PREN	ATAL			POSTN	JATAL	
Site	N	o	Y	es	N	o	Y	es
	%	n	%	n	%	n	%	n
Central Phoenix	60.0	6	40.0	4	80.3	57	19.7	14
Maryvale	90.9	10	9.1	1	79.5	70	20.5	18
East Valley	90.0	18	10.0	2	86.6	58	13.4	9
Nogales	100	5	0.0	0	93.3	28	6.7	2
Page	100	5	0.0	0	100	3	0.0	0
Pima-Team 8	89.5	17	10.5	2	89.8	53	10.2	6
Pima-Team 9	90.9	10	9.1	1	87.1	61	12.9	9
Pima-Team 10	84.6	11	15.4	2	88.9	40	11.1	5
Pima-Team 11	87.5	7	12.5	1	83.5	71	16.5	14
Douglas / Sierra Vista	100	2	0.0	0	78.9	30	21.1	8
Tuba City	100	13	0.0	0	92.6	25	7.4	2
Yuma #15	100	13	0.0	0	88.3	53	11.7	7
Lake Havasu	85.7	18	14.3	3	90.9	40	9.1	4
Flagstaff #1	86.4	19	13.6	3	88.9	16	11.1	2
Sunnyslope	100	10	0.0	0	71.3	72	28.7	29
Prescott	75.0	3	25.0	1	96.2	77	3.8	3
Mesa	90.9	10	9.1	1	84.4	76	15.6	14
Pima- Team 27	42.9	3	57.1	4	80.5	33	19.5	8
Safford	80.0	4	20.0	1	68.2	15	31.8	7
Winslow	100	9	0.0	0	91.3	21	8.7	2
Kingman	95.5	21	4.5	1	92.0	23	8.0	2
Bullhead City	90.9	10	9.1	1	87.5	56	12.5	8
West Phoenix	100	20	0.0	0	80.5	70	19.5	17
Flagstaff #2	87.5	7	12.5	1	70.0	7	30.0	3
Central Phoenix #1	100	9	0.0	0	68.3	41	31.7	19
Central Phoenix #2	90.5	19	9.5	2	70.3	52	29.7	22
North Phoenix	92.9	13	7.1	1	77.6	45	22.4	13
SE/NE Maricopa	60.0	9	40.0	6	81.8	54	18.2	12
Combo Phoenix	89.5	17	10.5	2	84.7	50	15.3	9
South Phoenix	50.0	4	50.0	4	88.4	38	11.6	5
SE Maricopa #7	92.3	12	7.7	1	81.0	47	19.0	11
SE Maricopa #8	100	17	0.0	0	86.7	65	13.3	10
Yuma #70	80.0	4	20.0	1	93.5	72	6.5	5
Total	88.5	355	11.5	46	83.6	1519	16.4	299



Low Birth Weight by Site - 2012 (Number and Percent within Site) Did the child have low birth weight?

Did the child have low birth weight? (less than 2500 grams, 88 ounces, or 5.5 pounds)

			IATAL	,	3, 01 3.5 pc		NATAL	
Site	N	О	Y	es	N	0	Υe	es
	%	n	%	n	%	n	%	n
Central Phoenix	75.0	9	25.0	3	80.9	55	19.1	13
Maryvale	100	10	0.0	0	82.6	71	17.4	15
East Valley	85.0	17	15.0	3	86.4	57	13.6	9
Nogales	100	4	0.0	0	89.7	26	10.3	3
Page	100	5	0.0	0	100	3	0.0	0
Pima-Team 8	100	17	0.0	0	91.2	52	8.8	5
Pima-Team 9	100	12	0.0	0	89.9	62	10.1	7
Pima-Team 10	91.7	11	8.3	1	88.6	39	11.4	5
Pima-Team 11	100	8	0.0	0	89.4	76	10.6	9
Douglas / Sierra Vista	100	2	0.0	0	80.0	32	20.0	8
Tuba City	100	12	0.0	0	93.9	31	6.1	2
Yuma #15	100	14	0.0	0	95.0	57	5.0	3
Lake Havasu	75.0	12	25.0	4	86.7	39	13.3	6
Flagstaff #1	94.7	18	5.3	1	89.5	17	10.5	2
Sunnyslope	100	7	0.0	0	73.8	76	26.2	27
Prescott	100	3	0.0	0	93.8	75	6.2	5
Mesa	90.0	9	10.0	1	86.8	79	13.2	12
Pima- Team 27	57.1	4	42.9	3	83.7	36	16.3	7
Safford	100	5	0.0	0	71.4	15	28.6	6
Winslow	100	7	0.0	0	91.3	21	8.7	2
Kingman	91.3	21	8.7	2	93.3	28	6.7	2
Bullhead City	100	10	0.0	0	90.1	64	9.9	7
West Phoenix	93.3	14	6.7	1	85.2	75	14.8	13
Flagstaff #2	77.8	7	22.2	2	80.0	8	20.0	2
Central Phoenix #1	100	9	0.0	0	78.0	46	22.0	13
Central Phoenix #2	88.9	16	11.1	2	74.3	52	25.7	18
North Phoenix	92.3	12	7.7	1	81.0	47	19.0	11
SE/NE Maricopa	78.6	11	21.4	3	80.0	52	20.0	13
Combo Phoenix	94.7	18	5.3	1	85.2	52	14.8	9
South Phoenix	33.3	2	66.7	4	90.9	40	9.1	4
SE Maricopa #7	91.7	11	8.3	1	89.5	51	10.5	6
SE Maricopa #8	92.9	13	7.1	1	90.8	69	9.2	7
Yuma #70	80.0	4	20.0	1	97.3	71	2.7	2
Total	90.5	334	9.5	35	86.2	1574	13.8	253



Yearly Income by Site - 2012

Yearly Income by Site - 2012 PRENATAL POSTNATAL										
C:1-		AL								
Site	Median Yearly Income	Number	Median Yearly Income	Number						
Central Phoenix	\$0	17	\$12,000	71						
Maryvale	\$14,400	19	\$9,600	90						
East Valley	\$0	27	\$10,000	68						
Nogales	\$18,000	9	\$7,000	30						
Page	\$8,400	5	\$18,000	3						
Pima-Team 8	\$3,360	22	\$0	59						
Pima-Team 9	\$0	20	\$2,640	72						
Pima-Team 10	\$0	17	\$4,800	45						
Pima-Team 11	\$0	12	\$955	86						
Douglas / Sierra Vista	\$3,600	7	\$11,592	41						
Tuba City	\$6,000	19	\$5,280	35						
Yuma #15	\$6,214	18	\$8,214	62						
Lake Havasu	\$14,400	26	\$14,400	47						
Flagstaff #1	\$10,800	32	\$2,400	20						
Sunnyslope	\$11,400	15	\$8,724	104						
Prescott	\$0	6	\$0	81						
Mesa	\$8,976	22	\$12,000	91						
Pima- Team 27	\$3,864	8	\$550	44						
Safford	\$6,600	6	\$10,000	23						
Winslow	\$8,340	13	\$6,300	23						
Kingman	\$12,000	45	\$9,600	31						
Bullhead City	\$6,000	22	\$8,400	73						
West Phoenix	\$12,000	25	\$9,900	88						
Flagstaff #2	\$7,560	9	\$14,200	10						
Central Phoenix #1	\$4,722	22	\$12,000	60						
Central Phoenix #2	\$ 5,940	32	\$11,400	74						
North Phoenix	\$10,200	23	\$12,720	59						
SE/NE Maricopa	\$7,200	23	\$7,200	66						
Combo Phoenix	\$12,000	27	\$12,000	61						
South Phoenix	\$8,088	9	\$12,000	44						
SE Maricopa #7	\$13,800	18	\$8,706	58						
SE Maricopa #8	\$1,980	18	\$12,000	77						
Yuma #70	\$1,440	7	\$9,600	78						
Total	\$7,800	600	\$9,600	1874						



Mother's Parent Survey Score by Site - 2012

Mother's Parent Survey Score by Site – 2012												
Site		PREN			POSTNATAL							
Site	0 - 20	25 - 40	45 - 65	70+	0 - 20	25 - 40	45 - 65	70+				
Central Phoenix	0.0%	47.1%	47.1%	5.9%	1.4%	29.6%	62.0%	7.0%				
Maryvale	0.0%	47.4%	36.8%	15.8%	0.0%	27.8%	62.2%	10.0%				
East Valley	0.0%	25.9%	74.1%	0.0%	1.5%	38.2%	52.9%	7.4%				
Nogales	11.1%	55.6%	33.3%	0.0%	6.7%	93.3%	0.0%	0.0%				
Page	0.0%	20.0%	80.0%	0.0%	0.0%	100%	0.0%	0.0%				
Pima-Team 8	0.0%	50.0%	36.4%	13.6%	3.4%	71.2%	22.0%	3.4%				
Pima-Team 9	0.0%	20.0%	70.0%	10.0%	5.6%	43.1%	45.8%	5.6%				
Pima-Team 10	0.0%	52.9%	47.1%	0.0%	13.3%	64.4%	22.2%	0.0%				
Pima-Team 11	8.3%	33.3%	58.3%	0.0%	8.1%	58.1%	30.2%	3.5%				
Douglas / Sierra Vista	0.0%	57.1%	42.9%	0.0%	9.8%	41.5%	43.9%	4.9%				
Tuba City	21.1%	57.9%	21.1%	0.0%	5.7%	82.9%	11.4%	0.0%				
Yuma #15	22.2%	44.4%	27.8%	5.6%	6.5%	75.8%	17.7%	0.0%				
Lake Havasu	7.7%	69.2%	19.2%	3.8%	10.6%	57.4%	31.9%	0.0%				
Flagstaff #1	3.1%	59.4%	37.5%	0.0%	10.0%	45.0%	35.0%	10.0%				
Sunnyslope	0.0%	33.3%	60.0%	6.7%	1.0%	26.0%	49.0%	24.0%				
Prescott	0.0%	33.3%	33.3%	33.3%	0.0%	67.9%	29.6%	2.5%				
Mesa	9.1%	22.7%	63.6%	4.5%	0.0%	25.3%	61.5%	13.2%				
Pima- Team 27	12.5%	50.0%	37.5%	0.0%	6.8%	31.8%	56.8%	4.5%				
Safford	0.0%	83.3%	16.7%	0.0%	13.0%	60.9%	26.1%	0.0%				
Winslow	0.0%	7.7%	53.8%	38.5%	8.7%	26.1%	60.9%	4.3%				
Kingman	2.2%	20.0%	66.7%	11.1%	6.5%	19.4%	64.5%	9.7%				
Bullhead City	0.0%	27.3%	59.1%	13.6%	4.1%	38.4%	52.1%	5.5%				
West Phoenix	0.0%	52.0%	44.0%	4.0%	0.0%	51.1%	44.3%	4.5%				
Flagstaff #2	0.0%	55.6%	44.4%	0.0%	0.0%	50.0%	40.0%	10.0%				
Central Phoenix #1	0.0%	45.5%	45.5%	9.1%	0.0%	20.0%	68.3%	11.7%				
Central Phoenix #2	0.0%	31.2%	56.2%	12.5%	0.0%	24.3%	64.9%	10.8%				
North Phoenix	0.0%	21.7%	69.6%	8.7%	1.7%	42.4%	44.1%	11.9%				
SE/NE Maricopa	4.3%	26.1%	65.2%	4.3%	0.0%	28.8%	56.1%	15.2%				
Combo Phoenix	3.7%	51.9%	44.4%	0.0%	1.6%	29.5%	60.7%	8.2%				
South Phoenix	0.0%	33.3%	66.7%	0.0%	0.0%	38.6%	54.5%	6.8%				
SE Maricopa #7	0.0%	27.8%	61.1%	11.1%	0.0%	53.4%	39.7%	6.9%				
SE Maricopa #8	0.0%	33.3%	44.4%	22.2%	0.0%	37.7%	58.4%	3.9%				
Yuma #70	0.0%	57.1%	42.9%	0.0%	11.5%	55.1%	30.8%	2.6%				
Total	3.2%	39.3%	50.2%	7.3%	3.5%	43.7%	45.6%	7.2%				



Trimester of Enrollment into Prenatal Program by Site - 2012

Irimester	of Eni	of Enrollment into Prenatal							
Site	1st Tri	mester	2 nd Tri	mester	3 rd Tri	mester		her	Total
Site	#	%	#	%	#	%	#	%	#
Central Phoenix	0	0.0	5	29.4	12	70.6	0	0.0	17
Maryvale	2	10.5	7	36.8	10	52.6	0	0.0	19
East Valley	0	0.0	9	33.3	18	66.7	0	0.0	27
Nogales	1	11.1	5	55.6	3	33.3	0	0.0	9
Page	1	20.0	1	20.0	3	60.0	0	0.0	5
Pima-Team 8	4	18.2	6	27.3	11	50.0	1	4.5	22
Pima-Team 9	2	10.0	5	25.0	12	60.0	1	5.0	20
Pima-Team 10	4	23.5	4	23.5	8	47.1	1	5.9	17
Pima-Team 11	3	25.0	4	33.3	4	33.3	1	8.3	12
Douglas / Sierra Vista	2	28.6	2	28.6	3	42.9	0	0.0	7
Tuba City	2	10.5	7	36.8	7	36.8	3	15.8	19
Yuma #15	0	0.0	8	44.4	9	50.0	1	5.6	18
Lake Havasu	1	3.8	7	26.9	18	69.2	0	0.0	26
Flagstaff #1	5	15.6	9	28.1	17	53.1	1	3.1	32
Sunnyslope	1	6.7	2	13.3	9	60.0	3	20.0	15
Prescott	1	16.7	2	33.3	3	50.0	0	0.0	6
Mesa	1	4.5	11	50.0	9	40.9	1	4.5	22
Pima- Team 27	0	0.0	2	25.0	6	75.0	0	0.0	8
Safford	0	0.0	3	50.0	3	50.0	0	0.0	6
Winslow	1	7.7	4	30.8	5	38.5	3	23.1	13
Kingman	19	42.2	12	26.7	6	13.3	8	17.8	45
Bullhead City	2	9.1	7	31.8	11	50.0	2	9.1	22
West Phoenix	0	0.0	11	44.0	14	56.0	0	0.0	25
Flagstaff #2	0	0.0	4	44.4	5	55.6	0	0.0	9
Central Phoenix #1	2	9.1	8	36.4	12	54.5	0	0.0	22
Central Phoenix #2	2	6.2	14	43.8	15	46.9	1	3.1	32
North Phoenix	4	17.4	4	17.4	14	60.9	1	4.3	23
SE/NE Maricopa	2	8.7	4	17.4	17	73.9	0	0.0	23
Combo Phoenix	2	7.4	10	37.0	13	48.1	2	7.4	27
South Phoenix	1	11.1	2	22.2	6	66.7	0	0.0	9
SE Maricopa #7	2	11.1	3	16.7	13	72.2	0	0.0	18
SE Maricopa #8	3	16.7	2	11.1	13	72.2	0	0.0	18
Yuma #70	0	0.0	1	14.3	5	71.4	1	14.3	7
Total	70	11.7	185	30.8	314	52.3	31	5.2	600

Engaged Prenatal Families that Exited Before Baby's Birth By Site - 2012

	<i>By Site</i> 2012	" 01 1		
Site	Total Families	# Closed before birth	% Closed before birth	
Central Phoenix	17	1	5.9	
Maryvale	19	0	0.0	
East Valley	27	0	0.0	
Nogales	9	0	0.0	
Page	5	0	0.0	
Pima-Team 8	22	1	4.5	
Pima-Team 9	20	0	0.0	
Pima-Team 10	17	0	0.0	
Pima-Team 11	12	0	0.0	
Douglas / Sierra Vista	7	0	0.0	
Tuba City	19	0	0.0	
Yuma #15	18	1	5.6	
Lake Havasu	26	1	3.8	
Flagstaff #1	32	1	3.1	
Sunnyslope	15	3	20.0	
Prescott	6	0	0.0	
Mesa	22	1	4.5	
Pima- Team 27	8	0	0.0	
Safford	6	0	0.0	
Winslow	13	0	0.0	
Kingman	45	9	20.0	
Bullhead City	22	0	0.0	
West Phoenix	25	0	0.0	
Flagstaff #2	9	0	0.0	
Central Phoenix #1	22	0	0.0	
Central Phoenix #2	32	1	3.1	
North Phoenix	23	2	8.7	
SE/NE Maricopa	23	0	0.0	
Combo Phoenix	27	2	7.4	
South Phoenix	9	0	0.0	
SE Maricopa #7	18	0	0.0	
SE Maricopa #8	18	0	0.0	
Yuma #70	7	0	0.0	
Total	600	23	3.8	



Appendix B. Healthy Families Arizona Steering Committee Members

Janice Mickens

Jenna Shroyer

Esthela Navarro

Department of Economic Security, Healthy Families Arizona Central

Administration

K Vilay

Michele Katona

First Things First

Craig LeCroy

Kerry Milligan

LeCroy & Milligan Associates

Ginger Ward

Suzanne Schunk

Southwest Human Development

Ellie Jimenez

Eric Schindler

Child and Family Resources

Stacy Reinstein

Department of Economic Security

Julie Rosen

Parenting Arizona

Becky Ruffner

Mary Warren

Prevent Child Abuse Arizona

Beth Rosenberg

Children's Action Alliance

Judy Krysik

Arizona State University

Marsha Porter

Phoenix Crisis Nursery

Joanne M. Karolzak

Casa de los Ninos

Mary Ellen Cunningham

Laura Gestaut

Department of Health Service



Appendix C. Parent Survey

Parent Survey*

Problem Areas and Interpretation (Mother & Father)

Toblem Areas and interpretation (Mother		
Areas (Scales)	Range	Interpretation/ Administration
Parent Childhood Experiences (e.g., Childhood history of physical abuse and deprivation)	0, 5, or 10	The <i>Parent Survey</i> comprises a 10-item rating scale. A score of 0 represents normal, 5
2. Lifestyle, Behaviors and Mental Health (e.g., substance abuse, mental illness, or criminal history)	0, 5, or 10	represents a mild degree of the problem and a 10 represents severe for both the Mother and Father Parent Survey Checklist items. The <i>Parent Survey</i> is an assessment tool and
3. Parenting Experiences (e.g., Previous or current CPS involvement)	0, 5, or 10	is administered to the mother and father prior to enrollment through an interview by a
4. Coping Skills and Support Systems (e.g., Selfesteem, available lifelines, possible depression)	0, 5, or 10	Family Assessment Worker from the Healthy Families Arizona Program. A family is
5. Stresses (e.g., Stresses, concerns, domestic violence)	0, 5, or 10	considered eligible to receive the Healthy Families Arizona program if either parent
6. Anger Management Skills (e.g., Potential for violence)	0, 5, or 10	scores 25 or higher.
7. Expectations of Infant's Developmental Milestones and Behaviors	0, 5, or 10	
8. Plans for Discipline (e.g., infant, toddler, and child)	0, 5, or 10	
9. Perception of New Infant	0, 5, or 10	
10. Bonding/Attachment Issues	0, 5, or 10	
Total Score	0 - 100	A score over 25 is considered medium risk for child abuse and neglect, and a score over 40 is considered high-risk for child abuse.

^{*} Modified from the Family Stress Checklist



Appendix D. Healthy Families Arizona Prenatal Logic Model

Long Term Outcomes					Program Resources					
 € Reduced child abuse and neglect € Increased child wellness and development ✓ Strengthened family relations ∇ Enhanced family unity ® Reduced abuse of drugs and alcohol Family Support Specialists; Family Assessment Workers; Clinical consultant Assurance/Training/Evaluation; Funding; Community based services, e.g., support & education programs, hospital programs, nutrition services, transportation services, mental health, domestic violence, substance abuse 							es, e.g., prenatal es, translation &			
			Pren	natal Prog	ıram	n Objectives				
Increase the family's support network	Improve mother's mental health	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve nutrition	Э	Increase empathy for the unborn baby	Increase father involvement	Increase safety in the home environment	Increase the delivery of healthy babies, free from birth complications	
		l	<u> </u>	m Activiti	ies a	and Strategies			L	
Assess family's support systems Model relationship skills Foster connections to positive support sources	Identify signs and history of depression, abuse, mental illness, substance abuse Review history of birthing Encourage medical assessment, referral and treatment if needed Encourage exercise, personal care, rest Educate on post partum depression	Assess personal risk behaviors Educate on risk behaviors, lifestyle choices, community resources, affect of drugs, medicines on fetus Explore domestic violence, form safety plan Encourage help seeking and adoption of healthy	Identify major life stressors Educate on problem-solving, goal setting. Use IFSP to review progress Educate on access to community resources, how to reach out Make referrals as needed for anger and stress management Teach stress reduction	Educate a provide materials o nutrition during pregnancy, buying and choosing healthy foods, and requirement for healthy fetal development with the resources Encourage healthy celebration.	nn hts hts	Explore and assess issues around pregnancy, relationships, hopes, fears Discuss and educate about changes in body, sexuality during pregnancy Share developmental information about stages of development of fetus Encourage prebirth bonding and stimulation exercises (reading, touch, etc)	Explore father's feelings, childhood experiences, expectations, hopes and fears about baby and goals for fatherhood Educate about changes in intimacy, ways father can support mother Encourage supportive relationships for father Educate on father's legal rights and responsibilities	Assess, encourage and guide family in making needed safety arrangements, e.g. crib safety, car seat, pets, SIDS, child care, feeding Educate on baby temperaments, how to calm baby, Shaken Baby Syndrome, medical concerns Refer to parenting workshops Explore cultural beliefs about discipline	Connect mother to prenatal care and encourage compliance with visits Encourage STD testing Educate on symptoms requiring medical attention Promote breastfeeding and refer to resources	
		behaviors	Outco	me Fyalı	uati	on Measures				
H.F. Parenting Inventor Prenatal (HFPIP); FSS-2		HFPIP; FSS- 23; CRAFFT	HFPIP; FSS-23	HFPIP; FSS		HFPIP; FSS-23	HFPIP; FSS-23; father involvement scale	HFPIP; FSS-23; Safety checklist	HFPIP; FSS-23; FSS20P	



Appendix E. Healthy Families Arizona Postnatal Logic Model

	Long	Term Outcor	nes				Program Re	esources			
∉ Increased chill ∠ Strengthened ∇ Enhanced fam	ed abuse of drugs and alcohol					Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., parenting support & education programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services					
	1		Pos	tnatal Pro	grar	n Objectives	1		1		
Increase the family's support network	Improve mother's mental health	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve far stability		Increase parental competence	Increase positive parent-child interaction	Improve child health <u>and</u> Optimize child development	Prevent child abuse and neglect		
			Progr	am Activit	ies a	and Strategies					
Assess family's support systems Model relationship skills Foster connections to positive support sources Educate on communication skills	Identify signs and history of depression, abuse, mental illness, substance abuse Address issues of grief and loss Encourage medical assessment, referral and treatment if needed Encourage/coa ch on exercise, personal care, rest Educate on post- partum depression	Assess personal risk behaviors; Educate on dangers of specific risk behaviors Support family in making lifestyle changes and adopting healthy behaviors Educate on community resources Explore domestic violence, create safety plan	Identify major life stressors Educate on problem-solving, goal setting. Use IFSP to review progress Educate on access to community resources, how to reach out Make referrals as needed for anger and stress management Educate about effect of stress on child	Assess basic living skills an needs; help fa access housin education, job and budget management services. Coach parent set and evalua goals; teach bliving skills Promote use community resources for sufficiency Explore fami planning decis	d amily g, b, c, t to atte pasic e of self	Provide empathy and support to parent in parenting role Teach child development, early brain development, temperament Address parental expectations of child Educate about importance of routines and rules Refer to parenting groups and classes	Promote and teach developmentally appropriate stimulation activities Educate about rhythm and reciprocity, reading baby's cues Promote reading, bonding during feeding Encourage family activities, celebrations Coach on father involvement	Complete developmental assessments and make referrals Address medical screenings, support well child checks, immunizations, and good nutrition habits Promote play, reading; provide links to early childhood programs Assess and Guide family in making safety arrangements, e.g., home and car safety	Assess risk of child abuse and neglect Coach and guide in choices for child care Educate about consequences of child abuse and neglect		
	1		Out	come Eval	uati	on Measures					
Healthy Families Parenting Inventor (HEPI): FSS-23		HFPI; FSS-23; CRAFFT	HFPI; FSS-23	HFPI; FSS-		HFPI; FSS-23	HFPI; FSS-23; father involvement scale	HFPI; FSS-23; Safety checklist; ASQ	HFPI; FSS-23; FSS20		

