Healthy Families Arizona
Evaluation Report
FY2006

(July 1, 2005-June 30, 2006)

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Acknowledgements

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We are grateful to Rachel Whyte and Amy Jo Filas, former and current coordinators for the Child Abuse Prevention Fund and Healthy Families Arizona, for their guidance and support. Valerie Roberson, Manager for the Office of Prevention and Family Support, continues to provide leadership and vision for the program. Last, but certainly not least, the Healthy Families Quality Assurance and Training Team deserves many kudos for their hard work during the continued expansion efforts by providing training in data collection, helping the sites collect data and use the findings for program improvement. Special thanks to Kate Whitaker, TA/QA Coordinator, Pauline Haas-Vaughn, Barbara Griffin, Kathy Van Meter, Ellie Jimenez, Danielle Gagnier, TA/QA Program Specialists, Penny Swenson, Administrative Manager, and Joan Duggan, Administrative Assistant.

The evaluation team for Healthy Families Arizona that contributed to this year's report includes evaluators Allison Titcomb, Ph.D., Craig W. LeCroy, Ph.D., Kerry Milligan, MSSW, Cindy Jones, BSBA, BSPA, Judy Krysik, Ph.D., Jen Kozik, MPH, Claire Brown, Ed.D., Olga Valenzuela, BA, Allyson Baehr, BA; and data management staff KristaLyn Santiago, BA, Veronica Urcadez, Delcia Cardenas, and Elizabeth Carmargo.

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Healthy Families Arizona 2006
Evaluation Report Highlights

Program Growth

- The number of sites increased from 23 to 51 sites in FY2005; the program continues to experience the effects of increased numbers of new staff and new families
- The program has made significant improvements in offering training in multiple formats (e.g., web portal and other electronic means)
- The prenatal program component that serves pregnant women and their families continues to expand and improve.

Service Delivery

- 5,173 families (4,182 postnatal and 991 prenatal) were served by the program from July 1, 2005 to June 30, 2006.
- 76% (3,957) of the families engaged with the program (4 or more home visits).
- 3,185 of these engaged families entered after the birth of their child and 772 entered prenatally.
- 59% of the postnatal families remained in the program 1 year or longer.

Program participants with significant risk factors at entry into program

Healthy Families Arizona screens and assesses families at intake to determine the level of risk factors they experience. The results show that the families screened into the program do exhibit the type of stressors that make them appropriate for program services.

Outcomes

- Parents improved on 8 of 10 subscales of the Healthy Families Parenting Inventory in areas such as mobilizing resources, social support, increased parenting competence, improved problem-solving, improved parent-child interactions, and decreased depression.
- Percent of eighteen-month olds with all immunizations was 84% (vs. state average of 79% for 2 year olds) and 98% of children were linked to a medical doctor.
- Safety practices (e.g., car seats, pool safety) improved.
- 11.8% of the postnatal, engaged mothers had subsequent pregnancies (25.3% were 18 years old or younger).

Recommendations

- Refine data collection training and follow-up.
- Consider ways to expand the leadership and promotion opportunities for staff.
- Focus efforts on maintaining or improving quality of core services.

Executive Summary

The Healthy Families Arizona Program

Healthy Families Arizona serves families experiencing multiple stresses that can put them at risk for child abuse and neglect. The program has operated in Arizona since 1991.

Program Implementation

Healthy Families Arizona continues to experience the effects of program expansion that began in the fall of 2004 with an increase from 23 to 51 program sites in FY2005. Continuing challenges in quality assurance and program monitoring and evaluation have emerged as the program experienced this rapid growth. The program continues to enhance its expansion of prenatal services for pregnant women and their families. The program has also increased its support services for staff in addition to new training and the improvement of alternative training options such as the web portal.

Special Studies

Retention of staff has been shown to be vital for family engagement and retention. One of the special studies included in this year's evaluation used a modified and expanded staff satisfaction survey to gain employee feedback and to explore the relationship between job satisfaction and employment expectations. Results showed positive perceptions of personal/professional fit, professional efficacy, and perceived community sanction. Encouragement of leadership and location attachment were two areas most closely associated with long-term employment intentions.

Healthy Families Arizona has been identified as part of a continuum of services that can positively influence school readiness. A second special studies area was undertaken to examine the relationship of Healthy Families Arizona activities and school readiness. A review of literature, interviews with key staff from the program and the State's School Readiness Board, and a document review of current program measures illustrated the overlap of program services and school readiness domains. Although the program was

not designed specifically to address school readiness, many of the core program activities (e.g., teaching parents about child development, encouraging immunizations and medical doctor connections, improving parent outcomes) are critical elements for school readiness efforts.

Service Delivery

- 5,173 families were served by the program from July 1, 2005 to June 30, 2006.
- 76% (3,957) of the families engaged with the program (4 or more home visits)
- 3,185 of the engaged families entered after the birth of their child and 772 entered prenatally
- 59% of the families remained in the program 1 year or longer.

Program participants report significant risk factors at entry into program (prenatal & postnatal percentages):

- 69% and 67% were single mothers
- 84% and 88% of the families utilized AHCCCS
- 70% and 63% of mothers had not finished high school

For postnatal families, risk factors at intake include:

- 19% of the infants were born with less than 37 weeks gestation
- 13% of the infants had low birth weight (less than 5.5 pounds)
- 36% of the mothers received late (after 3 months) or no prenatal care.

Program Outcomes

Healthy Parenting Behavior

The Healthy Families Parenting Inventory (HFPI) has been used by the program as a primary measure of program outcomes for the past two years. This year's analysis revealed statistically significant improvement on 8 of 10 subscales and the total score of the HFPI. Areas of improvement included the following: increased problem solving, decreased depression, increased use of resources, improved parent child behavior, improved home environment, increased parenting competence, and increased parenting efficacy. These results suggest that program participants are reducing risk factors that are related to child abuse and neglect. Furthermore, the effects of the program

seem to increase with time as revealed by the moderate levels of "effect sizes"[1] for the 12-month measures. These can be considered promising results for a home visitation program. Although these data lack a comparison group, they do continue to show that participants consistently report improvements in healthy parenting behavior.

Child Health, Development, and Safety

Child health and development indicators show positive results for the program. For example, there was a reported 84% immunization rate for the children of postnatal participants in the program at 18 months. This is in comparison to a 79% immunization rate for 2-year-olds in Arizona. A large percentage of families were linked to a medical doctor (98%). The program also screens for developmental delays and provides referrals for further services. Assessment of home safety practices shows over 90% of participants are using safety practices at the 24 month assessment (e.g., use of car seats, poisons locked, and smoke alarms installed).

Child Abuse and Neglect

Child abuse and neglect incidents (substantiated) were examined for program participants. The results reveal that child abuse and neglect rates continued to be low (0.76%) and met the program goal of having no higher than a 5% rate of child abuse and neglect. However, these results must be interpreted with caution as the ability to accurately estimate the incidents varies with the availability of specific identification variables.

Conclusions and Recommendations

The program reached more families and provided additional services to families and staff in the FY2006 program year than in past years. Parent outcome measures show significant gains at the 6-month and 12-month intervals. Continued expansion pressures may explain slight decreases in program outcomes.

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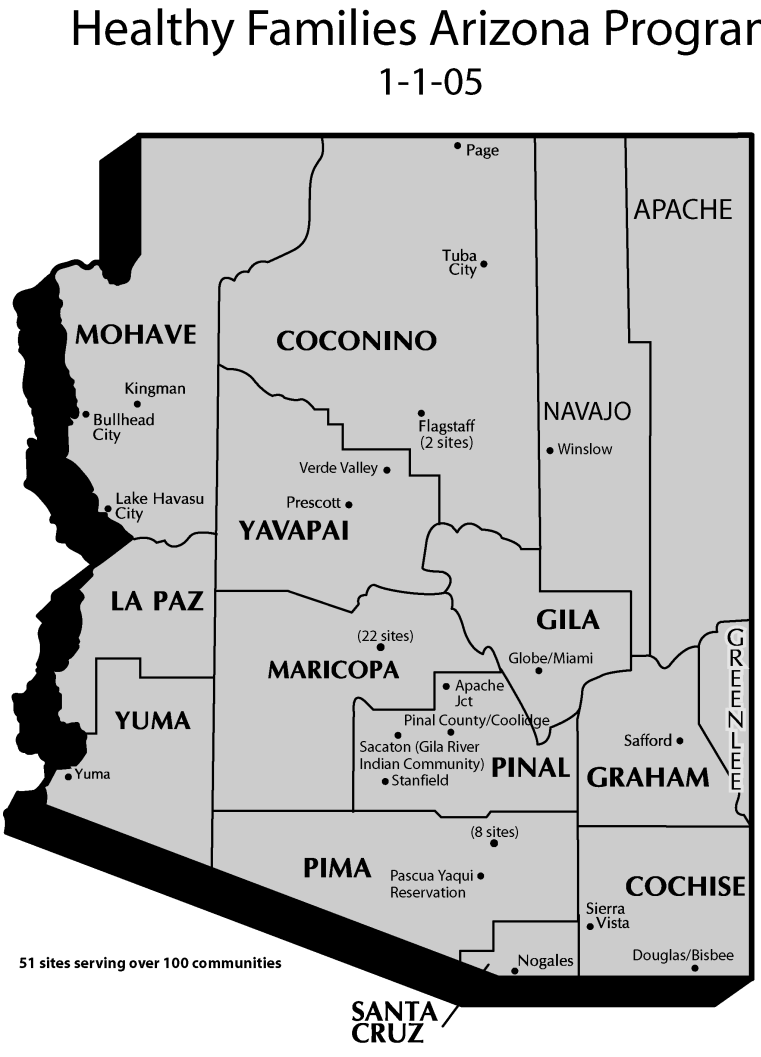
[1] Effect size is a descriptive statistic that measures the magnitude of the difference between two scores. In this report, Cohen's *d*, i.e., the standardized difference between two means, is used to report effect sizes.

Recommendations include continued refinement and monitoring of data collection training, activities and follow-up; additional sub-studies to explore the use of developmental screens and outreach efforts; explore options to measure parent-child interactions; review the child abuse registry match process; explore ways to encourage leadership and promotion opportunities for HFAz staff; and focus on core program activities to improve quality outcomes.

Introduction

Healthy Families Arizona (HFAz) was established in 1991 to "provide services to children under five years of age and members of their families that are designed to prevent child abuse and neglect and to promote child development and wellness."[2] In 2004, the program was expanded to serve pregnant women and families with histories of abuse or neglect. In 2005, the program services increased to 51 sites serving over 100 communities (see Exhibit 1).

Exhibit 1. Healthy Families Arizona Map



[2] In accordance with A.R.S.§ 8-701.

The program model of Healthy Families Arizona incorporates critical elements identified by Healthy Families America (HFA) as well as the mandated services established by Arizona legislation. The overarching goals of the program include the following:

- To promote positive parent/child interaction
- To improve child health and development
- To prevent child abuse and neglect

Healthy Families Arizona's home visitors provide supportive services and education to parents of newborns and to expectant parents who might benefit from support to strengthen their families at this crucial time**.** Families are selected via a screening process that begins in the hospital or community organization serving families in the prenatal period. If the parent experiences multiple risks (based on factors known to be associated with child abuse and neglect), the family is offered program services. The program is voluntary and the families may remain in the program for up to five years. In 2004-2005, two changes in policy expanded the program to serve two new target groups—expectant families and families with prior histories of child abuse or neglect. This year's report includes information on the continued expansion of these services.

As the program continues to increase its levels of services, it exhibits characteristics of a mature effort as well as ongoing challenges associated with rapid expansion, such as maintaining quality, reaching ambitious goals, and retaining new participants and staff. It has also experienced the challenge of finding qualified applicants for the new positions. Furthermore, it generally takes one to two years for full integration with such growth and it is expected that some decreases in outcomes may be observed in the interim.

The retention of workers and having quality staff have been noted as a key to sustaining the quality of home visitation programs. Therefore, one of the key features of this year's evaluation report includes a workforce survey that addresses elements of staff retention.

An additional "special study" included in this report discusses how the HFAz program may contribute to school readiness for the children, particularly older children, served by the program.

In addition to the annual evaluation results reported here, the five-year longitudinal study, initiated in 2004, continues its progress. The longitudinal evaluation differs from the ongoing evaluation in three essential ways. First, it follows the same 190 families for five years. Second, a randomized control group design as opposed to a comparison group will help determine program effectiveness. Third, additional measures will test a full-range of potential outcomes. For instance, domestic violence, substance abuse, mental health, and discipline are assessed on a regular and ongoing basis for both the treatment (Healthy Families participants) and control group. Participants in the longitudinal study are assessed at least once each year from their enrollment in the study until their child's fifth birthday. By age five, the children will be approaching elementary school, allowing for an assessment of school readiness. Zero to five is the period in which children are the most vulnerable to child abuse and neglect, and thus the most relevant for the study.

The Healthy Families Longitudinal Outcome Study is well underway with the majority of the 190 study participants having already been recruited into the project (95 in the control group and 79 of the intended 95 in the experimental group or those receiving Healthy Families). The Family Assessment Workers from the Pima County Healthy Families program collected referrals for the study in local Tucson hospitals. The two Research Assistants have recruited new mothers from these referrals into the study, conducted baseline data collection with the mothers before their babies turned 3 months old (in-home visits with verbal questionnaires), followed through with required retention efforts and are continuing with 6-month and 1-year visits. For additional information about this study, please refer to the Healthy Families Longitudinal Outcome Study Annual Report 2006.[3]

[3] These reports can be accessed via the web at www.lecroymilligan.com.

In this Report

Program and policy update

The report begins with a review of major changes and challenges in the Healthy Families Arizona (HFAz) program implementation and policy over the last year as the statewide effort has continued its expansion of sites (e.g., from 23 to 51 sites in FY2005 along with new support services for new and experienced staff).

Program implementation special studies

Healthy Families Arizona conducts an annual review of staff satisfaction and tracks staff retention. However, the relationship between staff perceptions and retention has never been analyzed. In 2006, an expanded "workforce survey" was conducted and influences on intention to leave were examined.

A second section describes the activities and measures within the Healthy Families program that relate to school readiness issues. Included are results from interviews and reviews of the tools and strategies used by the program. Perspectives from other research lend context to the results described in other sections of this report.

The third section reports on insights into the prenatal services component of Healthy Families Arizona. The program began to recruit and serve women prenatally in FY2005 and has now had at least one full year of implementation for this part of their continuum of services. Focus groups and interviews were conducted as follow-up to preliminary interviews in last year's report. A summary of the lessons learned is included here.

Program service delivery and outcomes

The final and main sections of this report focus on data related to service delivery, participant characteristics and selected outcomes for participants who received HFAz services between the period of July 1, 2005 – June 30, 2006. This includes all families who received services at any time during the study period regardless of when they entered the program. Information about families who enter prenatally are presented separately again this year since

some of the results are different for these families compared to families entering the program after the birth of their baby (postnatal). The service delivery section is followed by the outcome results (e.g., Healthy Families Parenting Inventory results, child abuse and neglect data, safety behaviors, etc.).

The main sections include aggregate data that is summarized across all sites that make up the Healthy Families Arizona program. Separate site reports are produced quarterly and provided to each site for quality management purposes. Some site level data are provided in the Appendix.

Program and Policy Updates

Exhibit 2 depicts some of the key program and policy changes that have occurred in the past year.

Exhibit 2. Developments in the Healthy Families Arizona program in 2005-2006

The Healthy Families Web Portal Now Provides Opportunities for Distance Learning to the Program Sites

Healthy Families Arizona launched its Web Portal in June 2005. During the summer of 2005 the Healthy Families Arizona Training and Quality Assurance Team of Program Specialists developed its first distance-learning module for the Orientation Training (Jump Start training) required by the credentialing body, Healthy Families America. The team enlisted a cadre of subject matter experts across the state with expertise in certain content components (e.g., child development, trust building, boundaries and limitations, child abuse and neglect reporting) to assist with the development of this module. This training must occur before a new staff member has independent contact with families, prior to the first home visit, family assessment, or supervision. Developing distance learning online enables the team to ensure the quality of the training and offers ease of use for each supervisor when new staff is hired. The Healthy Families Arizona Webmaster monitors Jump Start training module completion and generates a training certificate for each staff member. The Jump Start training was developed as a blended learning process that includes asynchronous module completion (on-line work completed independently), a workbook that requires interaction with other Healthy Families staff members, observations of family assessment and home visitation, and opportunities to interact with all staff participating in the module through discussion boards available on the Healthy Families Arizona Web Portal. The HFAz Web Portal can be accessed by going to http://www.healthyfamiliesarizona.org.

New Distance Learning Modules Available to Healthy Families Arizona Staff

The Training and Quality Assurance Team of Program Specialists has developed new training modules to provide quality training in content areas that are sometimes difficult to obtain in the rural areas. The new distance learning modules are also developed in a "blended learning" format that requires staff to interact with other members of the "web-based" classroom. The modules that have been developed this year and will be launched next year are Child Development and HFAz Supervision Orientation Training (Jump Start). The HFAz Supervision Jump Start training includes the data requirements and integration of all aspects of the HFAz program. The Program Specialist team will be developing additional on-line coursework in a blended format for family retention.

Prenatal Training for New Trainers

The Healthy Families Arizona senior training team members were certified by Healthy Families America to become trainers of trainers for the prenatal curriculum and have certified additional Program Specialists to conduct the prenatal trainings. This is an important opportunity as it ensures that anyone who conducts the prenatal training in HFAz is qualified and expands the opportunity to ensure easy access to this training by all staff.

Advanced Supervisor Training

Two of the Program Specialists received advanced training of trainers in supervision from Healthy Families America in early 2006. This training enabled members of the team to implement the three 2-day sessions of supervision training. Program quality is enhanced by effective supervision and this training expands the program's capacity in this critical area.

Multi-Disciplinary Team Training

As a result of the service expansion to families that have current or past involvement with Child Protective Services, Healthy Families Arizona offered training on the use of multi-disciplinary teams in partnership with the Excellence Committee, a multi-disciplinary committee charged to increase the quality of services across a broad spectrum of issues. The Healthy Families State Training Team continues to use the specialty training units to provide additional training to meet the needs of families facing multiple issues.

Through the use of these specialty training funds, most program sites have been able to contract with a clinical consultant that participates in monthly to bi-monthly team meetings and offers clinical support to staff working with families. With this type of clinical support, staff will be better able to address the multitude of challenges experienced by families participating in Healthy Families Arizona. Additionally, the Program Specialists have developed a series of trainings that specifically address how to "facilitate change" through the use of motivational interviewing techniques that are integrated within the Healthy Families Arizona approach.

To maximize the use of these specialty training funds, and to ensure that new skills are used in interactions with families, the Program Specialist team has developed three incremental training sessions that anchor experience and practice. Supervisors' training now is a series of three 2-day trainings that occur every six months that build on previous sessions. Content includes reflective practice, integration of tools and clinical support. The training team has also implemented two 1-day sessions of training every six months including the areas of 1) development of individual family service plans and 2) facilitating change.

Supervisors' Professional Development Guide

The Excellence Committee, a subcommittee of the Healthy Families State Steering Committee, developed a detailed Supervisors' Professional Development Guide that can be administered as a self-assessment tool for supervisors. It is anchored to the Healthy Families Vision for Supervision and identifies four key components of the role of the supervisor. These components are the ability to assess staff skills, the ability to support staff growth and development, the ability to provide program leadership, and the ability to maintain program standards and assure program quality. Within each of these key supervisory components are a series of standards and practices that supervisors can use to determine their own training needs.

Special Studies

Healthy Families Arizona Workforce Survey

An important element for participant satisfaction and program effectiveness is the retention of the home visitors who serve the families. To investigate the issue of staff retention, one of this year's evaluation strategies involved expanding the annual staff feedback survey that the program administers. The rationale for the revised survey was twofold. First, the survey was redesigned to capture a broad view of staff satisfaction, and, second, to provide a baseline from which to examine employee satisfaction in the coming years particularly as a way to provide a prospective analysis of staff attrition. The section below summarizes the process of the study and the results from the survey.

In April 2006 a workforce survey was administered to all Healthy Families Arizona staff attending the biannual Healthy Families Arizona Institute. Two-hundred and seventy-one individuals completed the survey, including family support specialists, family assessment workers, supervisors, administrative support staff, program managers, and program specialists.

Rationale and Background

Limiting staff attrition is important to continuity in programming and to protect the substantial investment that goes into training. Consistency among family support specialists is especially important in regard to participant retention. Recent research by Prado, Pantin, Schwartz, Lupei and Szapocznik (2006) points to the importance of the worker-family relationship in engaging families. Prado and colleagues found worker behavior and worker-family relationship to be better predictors of engagement than characteristics of the participant's family. Other research studies support the relationship between parent retention and a history of repeated and positive contacts with the family (Prinz, Smith, Dumas, Laughlin, White and Barron, 2001). According to McCurdy & Daro (2001, p. 17), turnover is an important program factor and "…low levels of staff turnover allow programs to keep their doors open and avoid service disruption with loss of clients." Longitudinal studies suggest that gains made by families are strengthened over time (Olds, Eckenrode, Henderson, Kitzman, Powers, Cole, Sidora, Morris, Pettit, and Luckey, 1997;

Seitz, Rosenbaum, & Apfel, 1985; Wieder, Poisson, Lourie, & Greenspan, 1988), emphasizing the importance of participant retention. In the Healthy Families Arizona program, 22 families discontinued involvement in 2004 as a result of a change in their family support specialist, 36 did similarly in 2005, and in the first six months of 2006 18 families exited the program due to change in their home visitor.

The importance of home visitor retention on participant retention is further reflected in qualitative data collected from Healthy Families Arizona participants. Sixteen active and former Healthy Families Arizona participants, all women, were interviewed in the spring of 2005 using a semi-structured interview. Participation in the Healthy Families Arizona program for the 11 active participants ranged from 18 to 58 months with an average of 30 months. The five former Healthy Families Arizona participants had all graduated after completing five years in the program. Aside from the help they received from Healthy Families, participants reported that the family support specialists were one of the major strengths of the program and a primary reason they remained involved in the program. Although services including developmental assessments, parenting information, and emotional and economic support helped induce their initial interest in the program, it was the relationships with the family support specialist that participants reported was the primary influence on their decisions to continue in the program. Despite the friendly, respectful characteristics of the family support specialist, those interviewed discussed the difficult process of building relationships. Participants reported that it often took time before establishing the rapport that allowed them to open up and trust their family support specialist. When the mothers experienced more than one family support specialist throughout their involvement with Healthy Families this reportedly created difficulty for them. This was particularly true when they were comfortable with a family support specialist who left her employment, leaving the family to build a new relationship with a new family support specialist. To illustrate, one mother stated: "There was some inconsistency among the family workers. I think there is such a high turnover and it impacts our relationship. We've had a couple and it's hard to rebuild relationships and feel comfortable again. It takes time. And then they seem to leave."

Five of the 16 participants interviewed had experienced between three and six family support specialists. Participants mentioned this created a problem for them since it produced the need to readjust to new relationships and get comfortable. For instance, one mother indicated: "Several workers quit so I had trouble adjusting to each one. I've had this one for a while now so I'm more comfortable with her." Similarly, three mothers felt there was a little "setback" when they had a new family support specialist. For instance, "It seemed like we started all over again. She didn't know where we left off, or what I had shared, so we basically started over."

Design of the Workforce Survey

The workforce survey was developed specifically for Healthy Families Arizona. The 70 items used in the analysis of the survey represent the 13 domains displayed in the first column of Exhibit 3. Respondents were asked to respond to each item on a 5-point Likert-type scale with responses ranging from '1 = strongly disagree,' to '5 = strongly agree.' The domains were chosen and items developed based on a review of relevant theory from the management and organizational design literature, as well as from a review of research related to employee retention in the helping professions, primarily nursing and child protective services. Example domains are presented in Exhibit 3 below.

Exhibit 3. Factors that influence worker retention

Domains	Study
• *organizational culture* • *perceived organizational performance* • *occupational attachment* • *location attachment*	Maertz (2004)
• *compensation* • *education* • *career development* • *flexibility* • *culture of the agency* • *advanced education* • *high-level position, years in the community* • *age* • *experience*	Rambur, Palumbo, McIntosh, & Mongeon (2003)
• *burnout*	McGee (1996)
• *public perceptions related to the job*	Research in retention of CPS workers

After the domains were specified and an item pool was developed, the draft of the survey was reviewed by a team of professionals involved in home visitation programming. Revisions were made based on the feedback. The survey was then piloted with three Healthy Families Arizona home visitors and revised based on the feedback from the pilot.[4] Intent to leave was measured by the responses to three questions: "I intend to work with Healthy Families as my long-term career," "I am actively seeking other employment," and "It is likely that I will make an effort to find a new job within the next six months." A summary of the development process is provided in Exhibit 4 below.

Exhibit 4. Development of Workforce Survey

Process Flow for Workforce Survey Development
Review Literature & Identify Domains
⇓
Create items (13 scales)
⇓
Review Draft
⇓
Pilot Survey
⇓
Revise from feedback
⇓
Develop final instrument

The questionnaire was self-administered in paper and pencil format following an explanation of the survey, a written and verbal guarantee of confidentiality, and an explanation of the voluntary nature of the survey. All questionnaires were printed in English. The overall response rate to the survey was high at 88% (271 completed surveys). Exhibit 5 presents a summary of the survey reliability data and example items for each of the subscales.

[4] The data in Exhibit 5 reveal that the 13 subscales derived from the workforce survey have good to excellent reliability with Cronbach's alphas ranging from a low of 0.71 to a high of 0.97.

Exhibit 5. Subscale domains and properties from the HFAz Workforce Survey

Subscale	# of items	Cronbach's Alpha[5]	Example question
1. Realistic expectations at entry	4	.83	Those who interviewed me for this job gave me an accurate picture of the work
2. Personal/professional fit	4	.77	The work I am doing suits me.
3. Professional efficacy	6	.80	I am generally effective in working with families.
4. Perception of workload	3	.79	The size of my workload is too big.
5. Quality supervision	15	.97	My supervisor provides the expert help I need to do my job
6. Opportunity for meaningful input	6	.80	I have the support to make work-related decisions when appropriate.
7. Leadership encouraged	5	.84	My employing agency shares leadership roles with staff
8. Location attachment	3	.73	I consider the community where I live "home."
9. Perceived employing agency performance	5	.81	I feel good about what my employing agency does for children and families
10. Non-salary reward	6	.82	My HF supervisor shows approval when I succeed.
11. Adequacy of salary	4	.86	I am satisfied with the salary I receive from my employing agency.
12. Opportunity for advancement	5	.71	This agency provides support for those working towards a degree or certificate.
13. Perceived community sanction	4	.84	Healthy Families staff are respected by other community professionals

[5] Cronbach's alpha is a common measure of reliability. It indicates to what extent a set of items represent a single, underlying construct. The higher the value, the more closely related the items are to each other, and, therefore, the higher the reliability.

Demographics of Staff

The demographics of the survey respondents reveal an ethnically- and age-diverse workforce with a relatively short tenure in Healthy Families Arizona. The relatively short length of time in the program is not surprising given the recent expansion efforts. The respondents were entirely female, ranging in age from 22 years to 69 years, with an average age of 37 years. A little over one-third of the respondents, 35.6%, had worked in the Healthy Families Arizona program for less than one year, another 34% had a tenure ranging between one and two years, and 30% had experience greater than two years. About one-half of the respondents described their ethnicity as white (49%), 35% reported themselves as Hispanic, 6% as Native American, 7% of mixed origin, and 3% as other.

What are HFAz staff intentions toward job retention?

A comparison of HFAz staff intentions toward staying in their jobs by type of employee reveals useful information. The data show that family support specialists tend to be the youngest of the three groups of employees. Further, family assessment workers are the most ethnically diverse and supervisors the least. Family support specialists are the least likely to report the intention to remain with Healthy Families, whereas the family assessment workers were the most likely to intend to stay. A summary of the differences in responses is presented in Exhibit 6.

Exhibit 6. Summary of demographic differences and responses by staff type

Survey Item	Staff Position		
	FSS (n=175)	FAW (n=37)	Supervisors (n=52)
Average Age	34	40	41
Percent employed 2 years or less	78%	66%	51%
Percent employed more than 6 years	9%	23%	29%
Percent indicating ethnicity other than white	58%	66%	31%
Percent intending to pursue long-term career with Healthy Families Arizona	54%	84%	64%
Percent *unlikely* to seek other employment in the next 6 months	66%	80%	81%

Family Support Specialists. The 175 family support specialists were the youngest category of worker, an average of 34 years of age, 78% had been employed with Healthy Families Arizona two years or less, and 58% reported an ethnicity other than white. Among this group, 66% reported that it was unlikely that they would make an effort to find a new job within the next six months, 73% reported that they were not actively seeking other employment, and 54% reported that they intended to work with Healthy Families as a long-term career. Thus, while the majority of family support specialists were not actively seeking alternative employment, only about one-half viewed Healthy Families as a long-term career.

Family Assessment Workers. The 37 family assessment workers were older on average than the family support specialists (an average of 40 years of age), 66% had been with Healthy Families Arizona two years or less, and 66% reported an ethnicity other than white. Among this group, 80% reported that it was unlikely that they would make an effort to seek new employment within the next six months, 82% reported that they were not actively seeking other employment, and 84% reported that they intended to work with Healthy Families as a long-term career. Thus, there is substantial stability in the family assessment worker workforce.

Supervisors. The 52 supervisors were similar in age to the family assessment workers, an average of 41 years of age. Healthy Families Arizona supervisors had the longest tenure with Healthy Families Arizona of the three groups: 51% had been employed with Healthy Families two-years or less, and 29% had tenures greater than six years. The majority of supervisors also tended to be white (69%), while only 18% reported their ethnicity as Hispanic, and the remainder reported as other or mixed origin. Among this group, 81% reported that it was unlikely that they would make an effort to find a new job within the next six months, 85% reported that they were not actively seeking other employment, and 64% reported that they intended to work with Healthy Families as their long-term career. The intentions for long-term employment were greater among supervisors than family support specialists and but not as high as among family assessment workers.

Analysis of the Workforce Survey Data

Exhibit 7 and Appendix C (standardized scores with a maximum of 100 and raw scores respectively) describe, overall, more similarities than differences among family support specialists, family assessment workers, and supervisors across all 13 subscales. Apart from the remarkable similarity, the most valuable information that can be gleaned from Exhibit 7 is the value of the mean scores in relation to the total possible maximum scores. The mean score tends to be relatively low in comparison to the total possible score in the following four areas:

1) perceptions of workload
2) opportunity for meaningful input
3) encouragement of leadership
4) perceptions of salary.

Areas that were rated especially positive among the groups were personal/professional fit, professional efficacy, employing agency performance, and perceived community sanction.

Exhibit 7. Mean scores (standardized to 100 point maximum) and standard deviations[6] on subscales by category of worker

Subscale	Family Support Specialists Mean Score (SD) n=175	Family Assessment Workers Mean Score (SD) n=37	Supervisors Mean Score (SD) n=52
Realistic expectations at entry	76.2 (17.2)	67.7 (19.3)	71.3 (23.3)
Personal/professional fit	84.4 (12.6)	80.9 (9.)	83.3 (13.4)
Professional efficacy	84.9 (10.2)	80.7 (16.4)	84.0 (10.3)
Perception of workload	55.0 (22.0)	57.9 (14.4)	55.6 (22.0)
Quality supervision	80.4 (18.2)	80.1 (12.6)	80.1 (15.6)
Opportunity for meaningful input	71.1 (14.6)	21.3 (3.2)	73.2 (14.4)
Leadership encouraged	67.4 (18.0)	63.7 (13.3)	73.0 (17.8)
Location attachment	68.0 (25.0)	66.4 (19.7)	73.6 (19.6)
Perceived employing agency performance	81.3 (15.5)	71.9 (12.4)	78.8 (17.5)
Non-salary reward	82.5 (13.8)	79.2 (12.9)	83.6 (14.5)
Salary	51.9 (24.2)	55.7 (18.7)	57.3 (22.4)
Opportunity for advancement	74.6 (14.9)	70.1 (14.6)	74.4 (17.9)
Perceived community sanction	83.6 (16.0)	77.6 (20.4)	80.3 (15.8)

[6] The mean, or arithmetic average, is a measure of central tendency and is calculated from the sum of all the scores divided by the number of scores. The median is also a measure of central tendency and it is the "middlemost" score or the value where half the scores fall above and half the scores fall below. The standard deviation is a measure of variability or dispersion and is the square root of the variance. Variance is computed as an average of the squared deviations of scores about the mean. The median is also a measure of central tendency and it is the "middlemost" score or the value where half the scores fall above and half the scores fall below.

Particular items that scored lower within the subscales point to potential targets for improvement. Two items were scored relatively low with regard to workers perceiving they have meaningful input. These items were in relation to perceptions of sufficient input in formulating policies that govern the worker's employment in 1) the employing agency and 2) within Healthy Families. The lowest scored items with regard to supervision centered on 1) the supervisor providing the expert help needed to do the job, 2) the supervisor helping the unit develop into an effective work team, and 3) the supervisor having an attitude that helps the worker be enthusiastic about the work. Approximately 30% of the workforce disagreed to some extent that they are paid fairly considering their education, training and professional experience, and 33% disagreed that they are paid fairly considering their responsibilities. A higher percentage, 41% of the workforce reported dissatisfaction with the salary received from the employing agency, and a much lower percentage, 20%, reported dissatisfaction with the benefits package.

The written comments on the workforce survey reveal a strong commitment and passion for the work itself. From the comments it is evident that the salary level, combined with a lack of advancement to supervisor for those with a bachelor-level degree, creates a "glass ceiling" effect and is a disincentive to long-term employment with Healthy Families. Family support specialists reported the value of supervisors having home visitation experience, and yet reported that, because of the education requirement for supervisors, individuals with the required educational qualifications but without the necessary experience were being hired.

Intention for Long-term Employment

A multivariate logistic regression analysis was performed to determine the best predictors of intention toward long-term employment with Healthy Families. This analysis was restricted to the family support specialists because the number of family assessment workers and supervisors did not support such an analysis. The item representing the outcome of interest was: "I intend to work with Healthy Families as my long-term career." Responses to this item were recoded into two categories as required by logistic regression. The responses 'agree' and 'strongly agree' were recoded as "long-term employment intended," and 'strongly disagree,' 'disagree,' and 'neither agree nor disagree' were recoded as "long-term employment not intended."

The first step on the multivariate analysis was to test all two-way associations between the predictors and the outcome variable. Three demographic variables (age, ethnicity, experience), and 11 of the 13 subscales were found to produce statistically significant associations with intended long-term employment. Only two of the 13 subscales were not significantly associated with intent toward long-term employment and these were workload and expectations upon entry.

The next step was to include all those variables in the logistic regression model that were found to be significant in the previous step. When the variables were analyzed concurrently using logistic regression, only three were found to be statistically significant ($p<0.05$ level). The three variables that are predictive of family support specialists' intentions to remain employed with Healthy Families in the long-term were as follows:

- encouragement of leadership,
- location attachment, and
- age.

The greater the perceived encouragement of leadership in the employing agency and in Healthy Families including shared leadership roles with staff, encouraging leadership for new projects, and supporting innovations , the more likely the intent to remain employed. Similarly, the greater the attachment to the location such as considering the community home, having a spouse or immediate family members attached to the area, and not willing to consider moving away from the area, the more likely the intent to remain employed. Finally, the greater the age of the family support specialist, the more likely the intent to remain employed with Healthy Families over the long-term. One variable not considered in this analysis because the data were not yet included was education. Further analysis of this data will look at the relationship between intention toward employment and actual worker attrition, and will include education.

Discussion and Recommendations

Increased interest in the home visitation workforce is warranted given the importance of worker turnover to participant attrition and also because of the investment in hiring and training. High levels of interest and positive perceptions about the work characterize the overall responses to the workforce survey. Based on the analysis of the areas most related to intentions for long-term employment, program administrative staff could discuss ways to improve opportunities for leadership and promotion.

School Readiness and Healthy Families

Introduction

Clear indications in research on child development point to the importance of early intervention, especially with children and families that may need extra support. The link between the quality of a child's early developmental experiences and success in later life is incontrovertible.

Nationally and at the state level, increased attention and emphasis has been placed on improving children's readiness for success in school, particularly at early ages. The National Governor's Association and other groups have drafted documents outlining key aspects for "school readiness." The Arizona Governor's Office for Children, Youth and Families' State School Readiness Board developed a five-year action plan that described ten action steps and strategies to promote ready families, ready programs and schools, ready teachers and ready communities. The expansion of Healthy Families Arizona was identified as a strategy to provide parent education and family support to strengthen families and promote school readiness.

> *Teachers report that a child's social and emotional "literacy" – the development of self control, respect for others, a sense of confidence and competence – is vital for success in kindergarten.*

This year's evaluation activities included key stakeholder interviews and a review of program data collection tools to describe the activities and measures utilized by HFAz that relate to school readiness. Six interviews were conducted in 2005 and 2006 with staff from agencies representing three counties in Arizona as well as the director of the Arizona School Readiness Board. Also, with the increasing interest in examining how Healthy Families Arizona services may help to promote school readiness, the evaluation team devoted the Summer 2006 issue of *Building Bridges: Linking Practice and Research on Home Visitation* to the topic of school readiness.

What is "school readiness?"

One of the articles included in the newsletter cited research on the home visitation programs and school readiness. In particular, Gomby (2003) was noted as pointing to a number of critical elements related to school readiness that home visiting programs may impact. Some of those for which related data is included in this report are:

- Child's physical well-being and motor development
- Social and emotional development
- Language development
- Promotion of healthy functioning in families
- Prenatal care and health care.

For a young child to be ready to succeed in school, dimensions of readiness [7] that could be considered include those described in the table below that mirror the elements described by Gomby (2003).

Exhibit 8. Dimensions of Readiness

Dimension of Child Readiness	Example
Physical health and motor development	Are children growing and developing properly?
Social and emotional development	Do children interact well with others and communicate their feelings in appropriate ways?
Approach to learning	To what extent do children show curiosity, enthusiasm, and persistence toward learning tasks?
Language development	How are children's listening, speaking, and print awareness skills developing?
Cognition and general knowledge	How much do children understand about the world around them?

[7] Source: www.gettingready.org website

Possible sources of information from HFAz that are related to these dimensions include immunization rates, medical doctor connections, *Ages and Stages* Questionnaire (ASQ) and *Ages and Stages Questionnaire-Social Emotional* (ASQ-SE), particularly at the 60-month interval, and referrals to Arizona Early Intervention Program.

Perceptions of Healthy Families' Contributions to School Readiness

Interview participants revealed much consistency in their perceptions about school readiness. Respondents were asked to describe their understanding or definition of school readiness in order to gain their frame of reference. Overall, the definitions varied only slightly in their specificity. All mentioned the importance of including social and emotional aspects of the child's development in addition to the cognitive and pre-academic aspects. They also mentioned the importance of early literacy and language development. All in all, they were very consistent with the School Readiness Board's description of well-prepared children as those who:

- are mature enough and eager to learn,
- have proper immunizations and completed well-checks,
- are familiar with letters and numbers, and
- exhibit comfort with groups of children (i.e., social engagement skills).

Understanding the characteristics of these different views is important because perspectives and assumptions influence decision making about appropriate curricula, services and measures.

When asked if HFAz increases the likelihood that children are ready for school, all those interviewed responded with a resounding "Yes, absolutely!" Examples of HFAz activities that support school readiness included the following:

- Developmental screening
- Teaching child development
- Encouraging family literacy
- Improving parent-child interactions
- Helping parents plan using goals of child development and supporting them in the achievement of those plans.

Most of those interviewed believed that HFAz does a particularly excellent job in serving families with children from birth to 18 months of age. They feel improvements could be made for families in the program whose children are 3-5 years old. The HFAz staff have searched for an appropriate 3-5 year-old curriculum for use in home visiting, but had not settled on a satisfactory one for use statewide. Most of the curricula for this age group were created for use in childcare centers, i.e., the curricula are typically center-based programming that consist mostly of separate activities versus a coordinated strategy to promote both parent-child relationship and healthy child development.

Staff Training on School Readiness Topics

Although HFAz does not provide specific training labeled "school readiness," it does conduct staff training in the highly relevant areas of child development and literacy, social/emotional development, as well as use and applications of the *Ages and Stages Questionnaire* and *Ages and Stages Questionnaire- Social Emotional*, developmental screens that are relevant to school readiness. Other trainings that staff received outside the HFAz program were also mentioned. *Success by 6* was noted as useful and informative. Additionally, some individual agencies supplement the HFAz training with their own internal training. For example, one agency provided a monthly child development seminar for supervisors and included an entire year of training on language and literacy. This same agency also provided additional training and technical assistance for Family Support Specialists and supervisors through specialized child development consultants who participate in case review, consult with supervisors, observe home visits, and help with referrals to the early intervention and other state agency programs.

When asked if HFAz should more explicitly include school readiness, respondents indicated that not all staff currently have a full understanding of school readiness topics. The time it would take to include more activities in addition to the other support services offered by the program could be a barrier. The respondents believed that staff value the general concept of school readiness, but also noted that with varied social service backgrounds many may not be highly familiar with child development and early literacy,

for example, when they first start.[8] Some staff may believe they include school readiness strategies, but might not include it in specific, concrete and consistent ways. The ability of the HFAz workers to understand and explain the concepts and the importance of them can influence the understanding and levels of engagement of the families about this topic.

Challenges that would need to be considered would include:

- time available to cover school readiness strategies,
- overall retention rate of families that can make it difficult to include the topics most relevant for preschool aged children,
- families with other issues that compete for their attention (e.g., home visitors have to help the families cope with crises, get immunizations for their children, learn discipline techniques, and other general parenting skills).

Finally, the volume of paperwork and documentation responsibilities for the home visitors, while not specific to school-readiness per se, can impede their ability to have adequate time for planning and focused attention on this issue. HFAz could discuss the relationship of the core program activities as they might influence school readiness. Without adding extra program strategies, the home visitors could enhance the description they provide about the concrete value and potential outcomes for the current support they offer to parents.

> *Home visitors can share simple yet important messages with families about daily activities families can do to enhance their children's learning:*
> *Talking with their children*
> *Reading to their children*
> *Engaging in activities*
> *Recognizing and understanding …milestones of healthy early child development.*
> *--SRB Director*

In addition to the staff from Healthy Families Arizona, an interview was conducted with the Director of the Arizona School Readiness Board. The details of this interview were published in the *Building Bridges* newsletter but a summary of her responses illustrates the value and contribution that can be made by home visitors in promoting school-readiness-related activities and knowledge with families. For example, in answer to a question about the

[8] Training in the first year includes such related topics as parent-child relationships, working with diverse cultures, infant/child growth and development, and promoting positive family relationships.

contribution of a program like Healthy Families, she said that home visitors "are an important source of support and information for families…families recognize that someone is there for them and that they do not have to weave their way through the system by themselves." Furthermore, she noted that home visitors "can help create a stable environment, by supporting and encouraging parents to provide positive learning environments within their homes."

The interviewees offered a number of suggestions that could help improve the ability of HFAz to promote school readiness. The two most frequently mentioned strategies included having an appropriate curriculum for home use with 3-5 year olds and additional emphasis from HFAz supervisors about the concepts and value of school readiness. HFAz should formally adopt a clear definition of school readiness, and should provide explicit training on the topic. As new staff are hired, applicants with backgrounds in child development should continue to be recruited, and specific child development consultants can be used, as they have in some sites, to support the home visitors and supervisors. A final recommendation noted that developing strong relationships with local Head Start programs, school districts, and the Arizona Early Intervention Program would enhance the school readiness connections of the HFAz program.

Developmental Screening and Review of Instruments

One of the most important services that is provided by a home visitation program is support for parents in their understanding of child development. A useful tool that can help identify appropriate focus for developmental interventions is the Ages and Stages Questionnaire (ASQ). As noted by Meisels (1999), "Developmental screening instruments serve a critical purpose in early childhood by identifying children who may need special services so that interventions can begin early." Healthy Families Arizona conducts a series of development screens to assist in the early identification of delays.

In early 2005, the program added the Ages and Stages Questionnaire-Social Emotional (ASQ-SE) screen to its "toolbox" of measures to support parents' understanding of their children's development. The primary purpose of these

screening tools is to "assist parents and early intervention and early childhood personnel in the timely identification of children with responses or patterns of responses that indicate possible future social or emotional difficulties." (Squires, Bricker and Twombly, 2002, p. 8). The data presented in this and other reports regarding the risk factors for families entering the program indicate a great need for attention to the social and emotional development of the children. The risk factors most related to difficulties for children include poverty, experience with abuse or neglect, substance abuse and young (teen) parents. The guidelines for administration of the ASQ-SE specifically recommend careful and consistent monitoring of the social and emotional development of children experiencing multiple risk factors.

Conclusion and Recommendations

Healthy Families Arizona exists as part of a continuum of statewide programs that collectively seek to improve the ability of families to ensure success of children as they enter school. The HFAz evaluation measures provide useful information to examine the program's contribution in promoting healthy parenting behaviors, supporting healthy child development and screening for early interventions.

Healthy Families Arizona, although not a program designed specifically to promote school readiness, includes core values and activities that are related to readiness efforts. As its primary goal, the program promotes healthy behaviors (e.g., immunizations, links to medical doctors), screening for developmental delays (e.g., ASQ and ASQ SE monitoring), helping parents learn about child development (e.g., discussions of ASQ results with families, *Growing Great Kids*, *Portage* and other curricula used in Arizona) and providing referrals to other community resources, some of which may specifically promote school readiness. Results from the other sections of this report highlight these components of the Healthy Families Arizona program.

Future evaluations could explore more deeply school readiness-related Healthy Families activities such as use of the *Growing Great Kids*, Portage and other curricula. Focus groups with home visitors could also explore their connections with other resources for families such as child care and schools.

Prenatal Services After One Full Year of Programming

In 2005, the Healthy Families Arizona program began including prenatal families as part of its continuum of services for families in Arizona. Because data collection for these families was only partially available, the last year's (2005) annual report supplemented the information with results from interviews with staff that reflected the early implementation experiences of the effort to serve prenatal mothers. The staff described referral sources and strategies used to offer services to mothers prior to the birth of their babies. The challenges noted last year were the following: a lack of understanding by potential participants for concrete benefits the program could provide (e.g., quite a few who were offered the program prenatally declined but then asked to participate after the baby was born); requests for additional training and resources directly related to the needs and concerns of prenatal mothers (e.g., the *Great Beginnings Start Before Birth* curriculum had not been received by all sites at that time[9], and a recognition that marketing materials needed to make the program sound more interesting to these families. Many of these concerns have been addressed by the program (see the policy update section in this report) but ongoing information about the continued expansion of the prenatal services could be helpful for continuous quality improvement efforts.

This year's process evaluation activities included several focus groups and additional interviews with staff in two locations regarding HFAz prenatal services. The lessons learned from these discussions are described below.

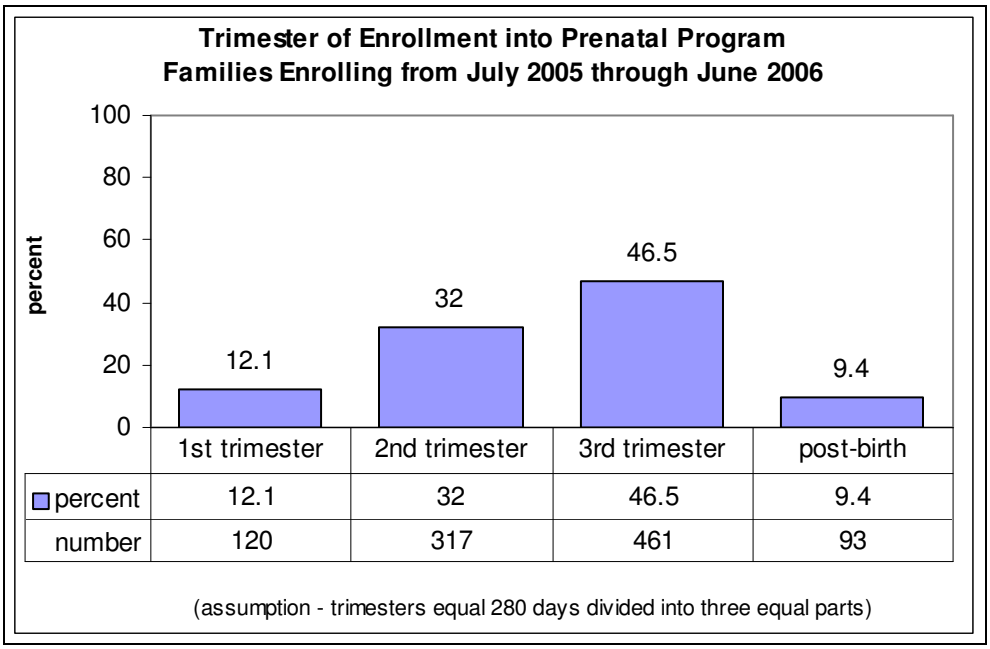
Family support specialists are very satisfied with the additional training they have received;

- Home visitors note that dealing with difficult birth issues (e.g., grief over a lost child, etc.) are very different from other home visitation issues;
- Home visitors feel that teaching the mothers to use their resources well is a critical part of the prenatal service activities;
- Sometimes home visitors complete all the curriculum activities well before the birth of the baby and therefore could use additional materials to keep the mothers engaged and interested in continuing in the HFAz program.

[9] It should be noted that the program has used *Partners for a Healthy Baby* curriculum for a number of years with HFAz mothers who had subsequent births.

The HFAz staff members noted that they continue to strive to reach families in the first trimester of pregnancy. Exhibit 9 shows the trimester of enrollment for all families entering the program prenatally. The majority of the families do not enter until the third trimester. This represents a challenge for the program to reach more families even earlier. Some families referred prenatally have an assessment completed after the birth of their baby. These families are represented in the final column (post-birth) of Exibit 9.

Exhibit 9. Trimester of Enrollment



Recruitment and retention strategies that seem to be effective, according to the staff interviewed, included (1) having the hospital social worker conduct initial screens for new participants and (2) having home visitors with a strong ability to offer concrete types of assistance to meet the mother's immediate needs.

Healthy Families Arizona Program Services

As noted in the introduction, referred families are screened to assess risk levels for admittance into the program. Services are offered to those who experience multiple risks. Parents who choose to enroll can receive services for up to five years. The following section describes the characteristics of families at intake and the second section reports on the services received by the families.

Program Participants—Risk Factors and Enrollment

During the period of July 2005 through June 2006, a total of 5,173 families (4,182 as postnatal and 991 prenatal) were enrolled in the Healthy Families Arizona program. Of these, 3,957 families became actively engaged in the program, [10] with 3,185 engaging after the birth of their child and 772 engaging during the prenatal period.

During FY2006, Healthy Families continued to expand the numbers of families served in its 51 program sites. Exhibit 10 shows the number of participants served by each site during FY2006. The number of participants continues to vary widely as sites continue their start-up progress at different rates and serve different urban and rural area needs.

[10] Actively engaged families are defined as those who participate in four or more visits.

Exhibit 10. Participants Enrolled and Actively Engaged July 2005- June 2006

County	Site	Prenatal	Postnatal
Cochise	Douglas/Bisbee	13	81
	Sierra Vista	22	57
Coconino	Flagstaff (La Plaza Vieja)	34	42
	Page	6	30
	Tuba City	11	41
	Williams (Kinlani)	27	47
Gila	Globe/Miami	9	23
Graham	Safford	11	24
Maricopa	Central Phoenix	9	99
	Deer Valley	9	73
	East Mesa	31	66
	East Valley Phoenix	14	83
	El Mirage/Surprise	14	85
	Gilbert	20	67
	Glendale	8	71
	Kyrene	20	69
	Maryvale	13	90
	Mesa	22	126
	Metro Phoenix	14	74
	*Northwest Phoenix**	14	37
	Scottsdale	8	44
	South Mountain	15	84
	South Phoenix + Tempe (2 sites)	36	113
	Southeast Phoenix	14	100
	Sunnyslope	11	80
	Tolleson/Avondale	14	75
	*West Phoenix**	10	66
Mohave	Bullhead City	9	32
	Kingman	10	50
	Lake Havasu City	22	82
Navajo	Winslow	10	17
Pima	Blake Foundation	14	94
	Casa de los Niños	16	107
	CODAC	20	118
	East/SE Tucson	8	40
	La Frontera	16	125
	Marana	7	66
	Pascua Yaqui	29	47
	Southwest Tucson	9	69
Pinal	Apache Junction	34	47
	Gila River	13	4
	Pinal County	13	88
	Stanfield	10	7
Santa Cruz	Nogales	10	97
Yavapai	Prescott	20	112
	Verde Valley	67	59
Yuma	Yuma	6	77

Prenatal Total All Sites = 772

Postnatal Total All Sites = 3,185

**Italicized sites are new sites started between July 2005-June 2006. This list of sites does not include 3 additional sites that "house" family assessment workers that bring the total to 51.*

The stressors experienced by families who participate in the Healthy Families Arizona program constitute **risk factors** that have been associated with increased risk for child abuse and neglect, as well as poor child health and developmental outcomes (LeCroy & Milligan Associates, 2001). Exhibit 11 highlights the risk factor data for both the prenatal and postnatal 2006 program participants when they entered the program with comparison to the general Arizona population.

Exhibit 11. Selected Risk Factors for Mothers at Intake--2006

Risk Factors of Mothers	Prenatal Families	Postnatal Families	Arizona—2004
Teen Births (19 years or less)	32.6 %	25.4%	11.7%*
Births to Single Parents	68.7%	66.7%	39.98%*
Less Than High School Education	69.7%	63.4%	29.06%*
Not Employed	80.6%	85.1%	NA
No Health Insurance	7.9 %	2.3%	NA
Receives AHCCCS	83.4%	88.3%	52.6%*
Late or No Prenatal Care (or Poor Compliance)	32.0%	35.9%	22.2%*
Median Yearly Income	$12,000	$12,000	$45,279**

*Source: 2005 data from the Arizona Department of Health Services Vital Statistics records. Percent does not include "unknown."
**U.S. Census Bureau Population survey 2004-2005 median income.
Note: Percentages for the combined total for Prenatal and postnatal families can be found in Appendix A.

These data illustrate that the screening process is successful in recruiting families with multiple risk factors as targeted by Healthy Families Arizona. The prenatal services reached double the number of families compared to last year. Both the prenatal and postnatal programs were successful in reaching single, teen mothers with less than a high school education. As in past years, Healthy Families participants consistently show notably higher rates of these risk factors than the overall rates for Arizona families. Overall, data revealed

that the prenatal mothers were slightly younger (average age 23.07 years) than the postnatal mothers (average age 24.43 years). In general, the characteristics of mothers served this year are quite similar to previous years. With median incomes around $12,000 it is clear that economic stress and poverty continue to pervade families' lives.

Healthy Families Arizona continues this year to serve a culturally diverse population. The ethnic background of the families who entered prenatally and postnatally in 2006 are shown below in Exhibits 12 and 13.

Exhibit 12. Ethnicity of Mothers Engaged Prenatally (N=764)

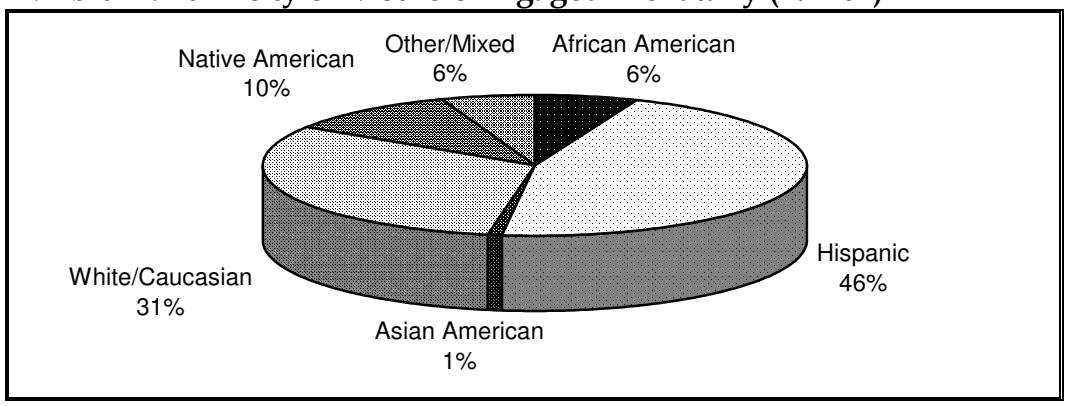
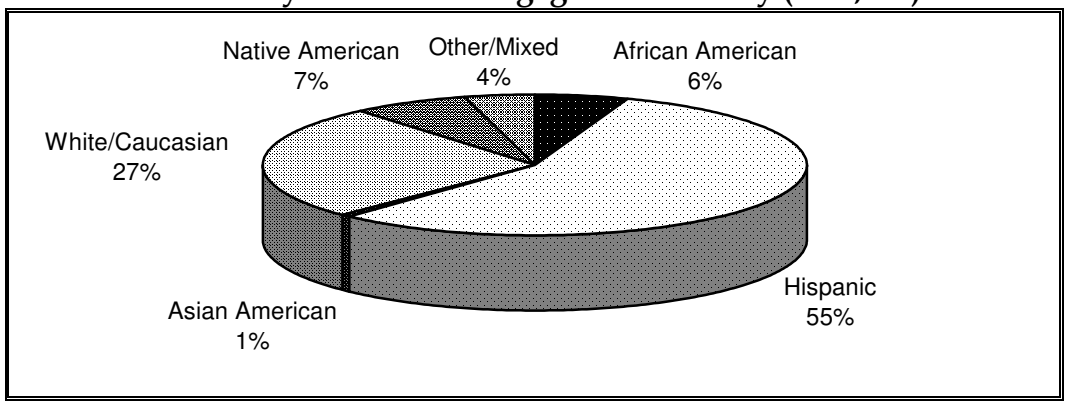


Exhibit 13. Ethnicity of Mothers Engaged Postnatally (N=3,135)



Healthy Families Arizona continues to encourage and support father involvement. During this year, ethnicity data was gathered on 675 prenatal fathers and 2,825 postnatal fathers. The ethnicity of fathers is displayed below.

Exhibit 14. Father Ethnicity-- Prenatal Families (N=675)

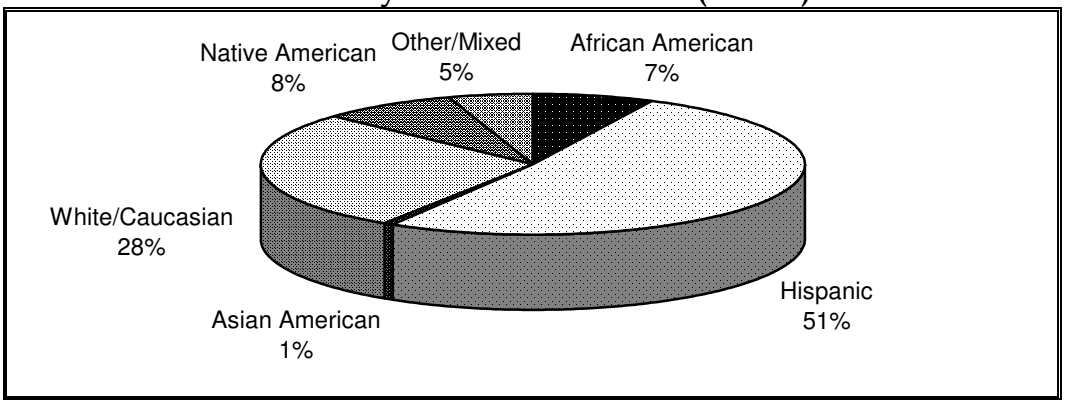
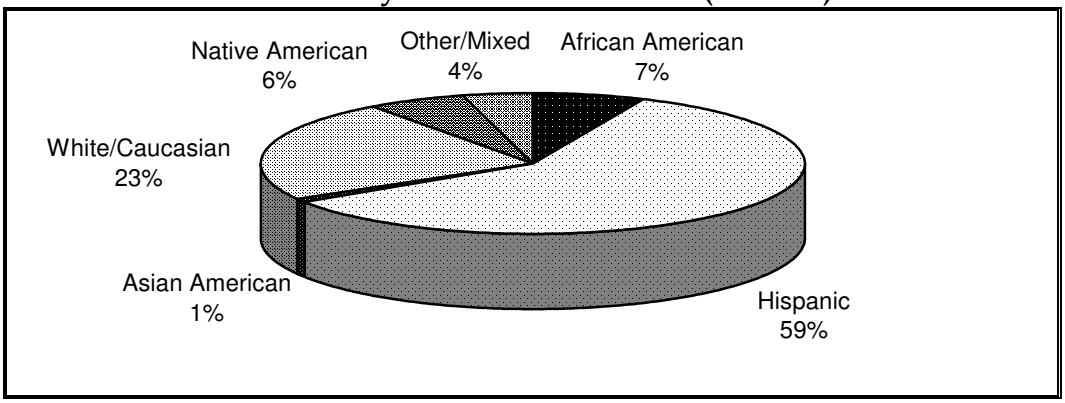


Exhibit 15. Father Ethnicity-- Postnatal Families (N=2825)



Families (mothers, and fathers when they are involved) are also assessed during the screening process with the ***Parent Survey***, a modified version of the Family Stress Checklist.[11] During the intake process, a Family Assessment Worker evaluates each parent's level of stress across 10 domains. The percentages of parents scoring severe on each of the scales are presented in Exhibit 16. A description of the scales is included in Appendix B.

[11] During the 2005 program year, the Family Stress Checklist was revised by the original developer of the rating scale and renamed the Parent Survey to impart a more strengths-based perspective with staff and families; however the rating scale remains the same.

Exhibit 16. Percentage of Parents Rated Severe on the Parent Survey Items PRENATAL

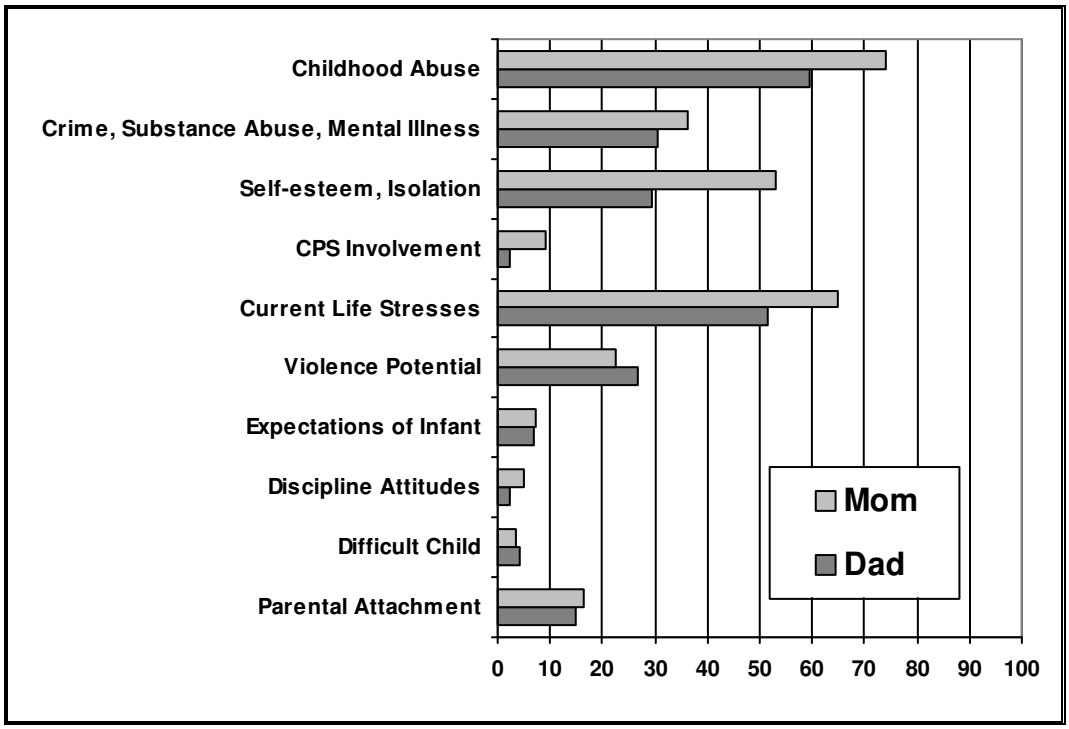
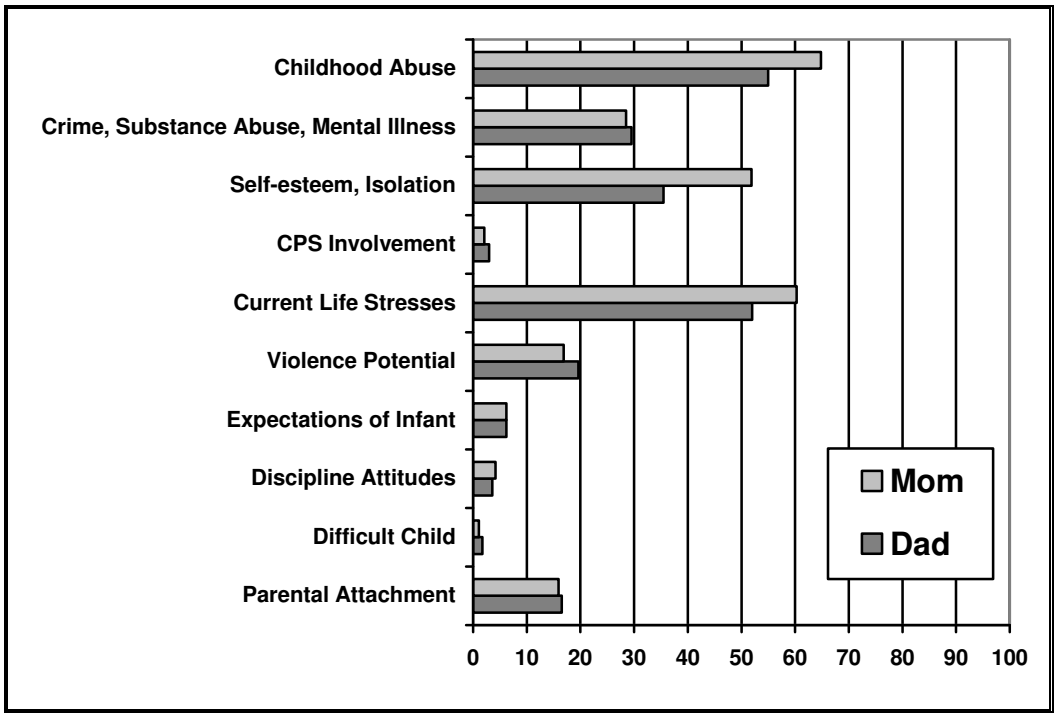


Exhibit 17. Percentage of Parents Rated Severe on the Parent Survey Items POSTNATAL



As in previous years, the most significant stressors are coping with a history of child abuse, having low self-esteem, feeling isolated, and dealing with current life stress, including low income, poor housing, and relationship difficulties. In addition, many families enter the program with risks related to crime, substance abuse and mental illness. Although the kinds of stressors affecting parents who enter prenatally are similar to those who enter the program after the birth of their babies, overall the percentage of severe stress scores is slightly higher for the prenatal families, indicating that the program is reaching the mothers who might most benefit from the earlier services by reducing stressors before the new baby arrives.

As noted in the program policy update section above, more training emphasis continues to be placed on increasing home visitors' knowledge and skills in addressing these most difficult risk factors with families.

Infant Characteristics

Information about infant risk factors are also assessed at intake for postnatal families or at birth for prenatal families. Premature, low birth weight and drug exposed newborns can impact families in financially and emotionally costly ways. These risk factors can also impact children throughout their life. They are at a greater risk for many problems including death within the first month of life, developmental disabilities and a myriad of health problems throughout their lives such as chronic lung disease, adult-onset diabetes, coronary heart disease, high blood pressure, intellectual, physical and sensory disabilities, and psychological and emotional distress.

This information comprises another indicator of the level of need of the families served by the program. It also represents an opportunity for the prenatal services offered by the program in that as Healthy Families Arizona reaches more women earlier in their pregnancy, the staff can help assure good prenatal care. Exhibit 18 displays the high-risk characteristics of the newborns among families who entered prenatally and postnatally.

Exhibit 18. Risk Factors for Infants --2006

Risk Factors for Infants	Prenatal Families	Postnatal Families	Arizona State percent
Born < 37 weeks gestation	17.2%	19%	10.7%*
Birth Defects	1%	1.1%	<1%*
Low Birth Weight	11.6%	13.5%	6.9%*
Positive Alcohol/Drug Screen	2.6%	2.5%	NA

*2005 data from the Arizona Department of Health Services Vital Statistics records

The percentage of postnatal Healthy Families Arizona program infants born early (less than 37 weeks gestation) is about the same as the 2005 percentage (16.6%) of Healthy Families participants, and it is nearly twice as high as the state rate. Some of the risk factors for those entering prenatally are slightly lower than those entering postnatally, and the percent of infants born early are slightly lower than last year's percentages. The percentage of low birth weight infants in the program remains high in comparison to the state rate. It is apparent that Healthy Families is reaching parents and babies who have greater risks leading to child abuse and neglect and other unhealthy outcomes. As the prenatal component of the program continues to grow, the Healthy Families Arizona home visitors have a great opportunity to help mothers prevent having pre-term or low birth weight babies by encouraging parents to attend regular prenatal visits and adopt healthy behaviors such as good nutrition habits and stopping alcohol, drug and tobacco use.

Service Delivery

The 2006 program year included continued challenges as new sites started up, newer sites added staff, training for new and continuing staff was conducted and expanded, and ongoing documentation of services and activities had to be learned by new staff and relearned by continuing staff. Newer quality assurance forms that were developed in the previous year continued to be implemented and assessed for their efficacy in tracking service delivery. This section provides a brief overview of numbers of families engaged, services received and family satisfaction with the program.

During the current study year the total number of families enrolled by the program was 5,173. Not all families who enroll become actively engaged in the program. Successful program engagement is defined as those families who complete 4 home visits. A breakdown of the total families enrolled in Healthy Families Arizona, for whom accurate home visit information is available, reveals that:

- 3,185 postnatal families became actively engaged
- 429 postnatal families left the program before 4 visits
- 772 prenatal families became actively engaged
- 80 prenatal families left the program prior to 4 home visits.

Overall the engagement rate among families who entered postnatally was 76.1% percent. This is lower than the rates from the two previous years (85.3% in 2005 and 90.7% in FY2004). Part of the explanation for the lower rate may stem from the challenges associated with extended program startup in many of the new sites. Another explanation could be the families for whom the number of home visits before closure could not be determined.

For prenatal families, the 77.9% engagement rate is slightly higher than the postnatal families, but it is also slightly lower than last year's rate (80.6 %). Some of the challenges in recruitment were described earlier in this report and it will be important to continue to examine engagement of prenatal and postnatal families on a continual basis. For example, some mothers do not understand the value of the program services until after their baby is born.

The length of time families stay in the program decreased slightly this year. For all the families (both postnatal and prenatal), the median number of days in the program was 439 (about 1 year and 2 months). For the families that left the program during the past year (n= 770), 58% had been in the program over 12 months, compared to 66% last year.

The most frequently given reasons for leaving the program include:

1) did not respond to outreach (30.7%)
2) moved away (23.4%)
3) completed program (11.1%)
4) family refused further services (10.0%)
5) reported self-sufficiency (6.7%)
6) unable to locate (5.8%).

The Healthy Families program model includes resource referral as an important link between families and needed community resources. Home visitors provide information on child development education, as well as modeling and coaching mothers in bonding with their child. However, equally important are the home visitor's efforts to connect the family to other resources in the community. Some Healthy Families sites exist in communities with adequate resources and others occur in communities where limited support resources are available for families. When interpreting the information provided below on types of referrals, it is important to note that a common concern among more rural sites is that there are not enough options for families who need help. Furthermore, transportation can be a significant barrier as families travel to other communities to access resources.

In the previous program year (FY2005), the Healthy Families program made several changes in the types of data collected to try to better track the types of external resource referrals made by home visitors and the outcomes of those referrals in terms of services actually received. After a year of use, the difficulty of reporting that information and the form in which it was collected was again reviewed and additional recommendations for changes beginning with the 2007 program year were passed by the program's policy committee. For this year, data are reported from the relatively new form that was used for a little over one year. Exhibit 19 below illustrates the types of referrals made

by Family Support Specialists for those families who were served at the 6, 12, 18 and 24-month intervals. The largest percentage of the referrals continue to fall into the "Other" category; this may indicate that the data collection tool does not capture the full set of types of service referrals that are commonly made.

Exhibit 19. Types of Healthy Families referrals at six, twelve, eighteen and twenty-four months

Service referrals	Types of referrals at 6-months (n=2850)	Types of referrals at 12-months (n=1636)	Types of referrals at 18-months (n=765)	Types of referrals at 24-months (n=411)
Health Care	12.6%	12.3%	14.1%	16.8%
Nutrition Services	9.7%	8.1%	8.4%	5.6%
Public Assistance	16.1%	17.7%	18.2%	9.5%
Family and Social support	11.5%	11.1%	7.6%	11.4%
Employment, Training and Education	10.5%	11.6%	12.2%	11.9%
Counseling and support services	10.8%	10.6%	10.3%	7.3%
Other	28.7%	28.7%	29.3%	37.5%

Child Development Screening

One of the important services provided by Healthy Families is monitoring, screening and assessment of child development. The program uses the Ages and Stages Questionnaire (ASQ) as a screening tool for developmental delays. One of the main advantages of the tool is that it is considered very "parent friendly" and usable.

The program has a challenging process goal of administering the questionnaire with 80% of the children in families served by the program. In 2006, just under two-thirds of all children were screened for developmental delays. This represents a decrease compared to previous years, and, as noted in the 2005 report, this could be due to continued program expansion issues as new workers have much to focus on during their first year and data collection is new to them. Based on file reviews during site visits, there is some indication that this is more of an issue of data collection rather than ASQ administration. However, a primary objective of the program is to administer the ASQ as a monitoring function so this is an area that deserves continued attention. The data show a similar pattern to the previous year in that the percentage of children screening as delayed increases with age.

Exhibit 20. ASQ Screening (Postnatal Only)

Interval ASQ Administered	Percent of children screened with ASQ 2004	Percent of children screened with ASQ 2005	Percent of children screened with ASQ 2006	Percent screened as delayed 2006
6-Month	81.0 %	72.4 %	59.9%	4.9 %
12-Month	80.6 %	78.8 %	59.3%	5.9 %
18-Month	73.3 %	72.0 %	64.5%	17.1 %
24-Month	76.1 %	72.3 %	66.2%	17.8 %
30-Month	75.1 %	71.6%	64.1%	16.1 %
36-Month	NA	73.3%	69.2%	22.8%
48-month	NA	66.7%	64.1%	19.0%

Program guidelines suggest that when an ASQ score falls into the "cutoff category" that indicates a potential delay, further assessment is required to determine whether the child needs additional intervention services. Continued assessment sometimes indicates no delay is in fact evident. Approximately one-fourth to one-fifth of the children who initially screen delayed with the ASQ are determined to be "not delayed" when referred for further assessment.

In other cases, further assessment suggests additional intervention is needed, and appropriate referrals need to be made. The Family Support Specialist may also provide appropriate development interventions with the child and family. The table below describes the pattern of these services, and they are generally similar to previous years with referral to the Arizona Early Intervention Program (AzEIP) being the most common external resource used for children 18 months and older, although multiple intervention referrals can and often are used. It is notable that as potential delays are identified, the most common intervention choice is the Family Support Specialist providing a developmental intervention at home with the parent and child (52% at 36 months and 56% at 48 months report providing this service). This may reflect the program's emphasis on providing appropriate support for parents and follow-up to discussions with the families about the results of the ASQ. It can also indicate an appropriate use of child development curricula in the Healthy Families program model, as the home visitor becomes more familiar with the child and family over the course of service. Further exploration into this aspect of the program model may illuminate how these professional choices are made. Exhibit 21 illustrates the types of referrals and services received by families with children exhibiting delays.

Exhibit 21. ASQ Referral Status—2006 (Postnatal Only)

	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)
6-month Screen	23% (8)	9% (3)	20% (7)	63% (22)	3% (1)	3% (1)
12-month Screen	29% (7)	8% (2)	12% (3)	54% (13)	4% (1)	4% (1)
18-month Screen	18%(8)	16% (7)	9% (4)	72% (31)	9% (4)	2% (1)
24-month Screen	10% (3)	39% (12)	16% (5)	71% (22)	0% (0)	3% (1)
30-month Screen	5% (1)	47% (9)	16% (3)	42% (8)	11% (2)	5% (1)
36-month Screen	26% (6)	17% (4)	17% (4)	52% (12)	4% (1)	0% (0)
48-month Screen	31%(5)	6%(1)	12%(2)	56%(9)	6%(3)	6%(1)

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

ASQ-SE

In 2004 the Healthy Families program added an additional screening tool to supplement the information gathered by the ASQ. The *Ages and Stages Questionnaire-Social Emotional (ASQ-SE)* is primarily used to assist parents and early intervention and early childhood personnel to make a "timely identification of children with responses or patterns of responses that indicate possible future social or emotional difficulties" (Squires, Bricker and

Twombly, 2002, p. 8). As with the ASQ, the ASQ-SE was designed as an aid in identification of developmental delays and can help parents understand more about child development and their own child's needs. The timing for administration of the ASQ-SE is not as narrow as with the ASQ (e.g., there is a six-month time frame for completion of the ASQ-SE); therefore rates of administration are not reported here. However, Exhibit 22 reports a summary of the ASQ-SE results (median and mean scores) obtained for postnatal families served by the program. For comparison, the cut-off scores (i.e., the score above which a recommendation for further assessment is made) are also listed.

Exhibit 22. ASQ-SE

Interval ASQ-SE Administered (N)	Mean ASQ-SE Score	Median ASQ-SE Score	ASQ-SE Cutoff Score*
6-Month (709)	16.50	15.00	45
12-Month (423)	18.58	15.00	48
18-Month (225)	24.04	20.00	50
24-Month (100)	25.00	20.00	50
30-Month (49)	34.59	30.00	57

*Scores above the cutoff score indicate need for additional assessment.

The relatively low averages for children in the program could have several explanations. One is that the scores on the Social-Emotional scale may be more subject to a "social" bias than the ASQ because the "socially acceptable" response is more clearly seen than with the items on the ASQ. Another possible explanation is that the families served by the program may not feel they have any concerns about the social and emotional aspects of the child's development. As more home visitors use and report the ASQ-SE, additional analyses can be conducted to describe the results for different types of families and to describe the manner in which the home visitors incorporate the ASQ and ASQ-SE in their discussions with parents about child development.

Fatherhood/Male Involvement Data

Healthy Families Arizona began asking questions related to male involvement in January 2005. The male involvement section of the FSS-20 form asks questions about the following categories: shared responsibility of the child through both basic care (feeding, bathing, etc.) and extended care (transportation, appointments, etc.), financial support, residence in the child's home, and male participation in HFAz activities. These questions are asked of male involvement of the father, partner, grandfather, and other male figures. There is also a 'none' option for every question, which indicates no male figure. These questions are completed during the same times as the FSS-20 form (6 months, 12 months, 18 months, etc.).

From January 2005 to June 2006, 2,172 families were eligible to answer the male involvement questions. During this time, approximately 835 (30%) of the families had data recorded in this area. These data had significant amounts missing at 6 months with even more missing at 12 and 18 months. Therefore, these findings should be interpreted with caution and should be considered to be preliminary in nature.

Of those families where information was available, fathers were the most frequently involved, followed by grandfathers, partners, and the other categories. The following table shows the percentage of male involvement across time.

Exhibit 23. Male Involvement Across All Categories at 6 and 12 months*

Male Figure	6 months	12 months
Father	66% (n = approx 548)	63% (n= approx 258)
Grandfather	31% (n= approx 65)	29% (n= approx 33)
Partner	11% (n = approx 18)	10% (n= approx 10)

*Male involvement percentages were calculated based on the 'Yes' responses across all six questions. Among the different categories, males were least involved with HFAz activities as compared with the other categories. Across the other five categories, male involvement was relatively consistent.

Across the categories, approximately 66% (548) of fathers were involved in the child's life. These findings should be reviewed with caution, however, due to the large amount of missing data. Approximately 67% (331) of women who were single at intake reported the child's father shared child care responsibilities at six months. Grandfather involvement was the next most frequent category. For those who responded, nearly 31% of grandfathers were involved at six months. Approximately 11% of partners were considered involved in the child's life. Similar patterns of involvement were seen at 12 months.

The program staff are interested in reaching out to fathers. At this time and using these measures, father involvement cannot be adequately assessed. One reason is that if there is any male involvement, it is relatively high across all the categories. The program staff should review the need to include this data collection strategy and to explore other ways to document father involvement with the program services. This review process has been started and is expected to continue into the next program year.

Participant Satisfaction

Satisfaction with the program is an aspect of program implementation that can influence motivation to stay enrolled. Asking for feedback from families can also help them feel valued. Healthy Families program sites distribute a satisfaction survey to participants during a two-month time period each year. For this program year, 1134 surveys (approximately 28%) were returned from 47 sites. This is a large number of families, but they are not fully representative of all families served by the program. Regardless, the results can provide important feedback for the program. A separate Satisfaction Report (LeCroy & Milligan Associates, 2006) was completed for sites that included a variety of satisfaction questions, and that analysis revealed high satisfaction in all areas of the program. For this report, only several critical areas are highlighted below.

Two key components of the Healthy Families model are 1) the use of the Individual Family Support Plan (IFSP) to set concrete goals with participants and 2) the teaching of child development and parenting skills. Exhibits 24 and 25 show that participants feel quite satisfied with the child development materials and understand the service plan (IFSP).

Exhibit 24. Responses to "I understand when the home visitor explained the family service plan to me."

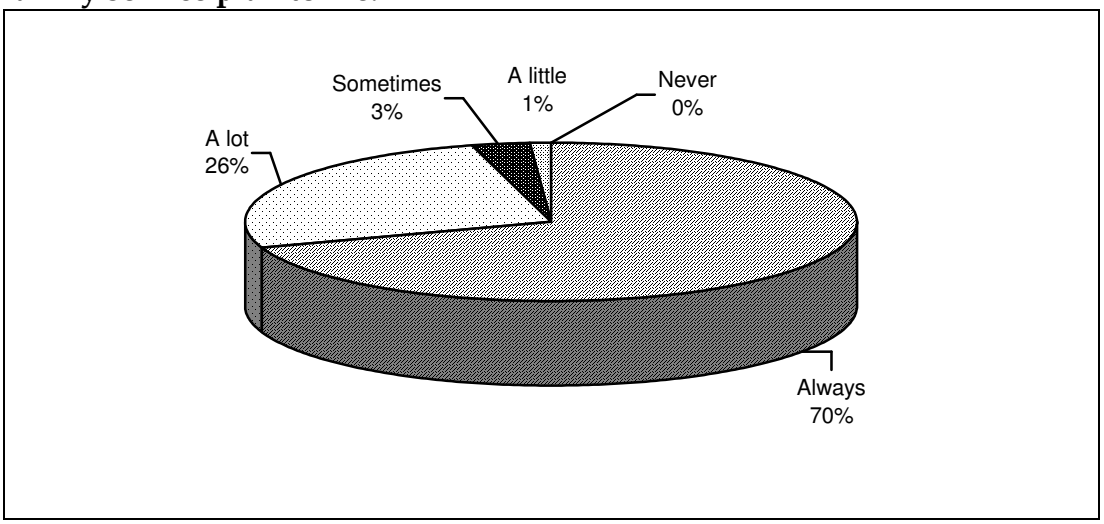
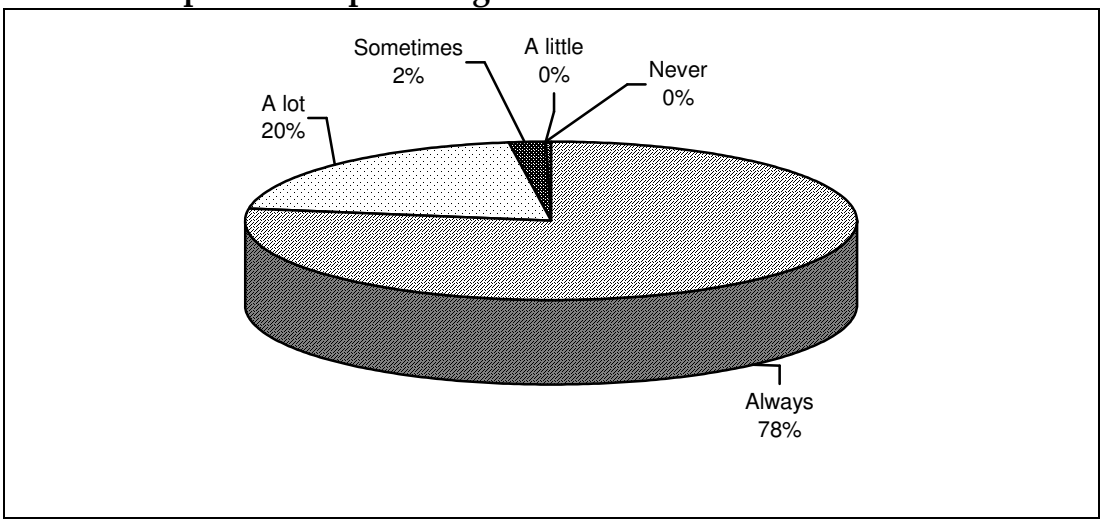
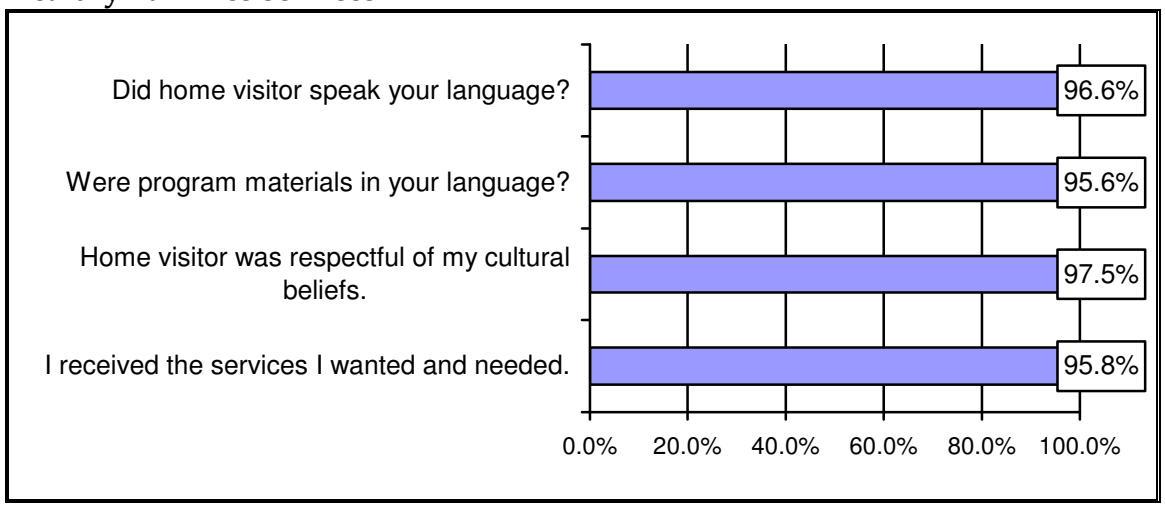


Exhibit 25. Responses to "I was satisfied with information provided on child development and parenting."



As in prior years, a large percentage of HFAz participants speak or use Spanish as their primary language. It is critical that home visitors speak the families' language and program materials are translated appropriately and in a culturally respectful manner. Participant responses regarding the relevance of program materials are shown below in Exhibit 26.

Exhibit 26. Participants' perception of usefulness and responsiveness of Healthy Families services



* For questions 3 and 4, on a five point scale, percentages shown are "a lot" and "always" combined

In summary, and consistent with prior years, all of the participant satisfaction data suggest the program is well received by the participants. This is particularly important for a voluntary program. Furthermore, program satisfaction is a first step in producing program outcomes. The program staff could try to increase the numbers of families completing the survey. This would increase the confidence that the results are representative of more of the families in the program and not just those families who completed the survey.

Program Outcomes

Program Logic Model

Two logic models developed in 2005 for the Healthy Families Arizona program, one for the postnatal services and one for prenatal services, continue to provide guidance in thinking about the program, in organizing results and in identifying areas for development. Both logic models are again included in Appendix F & G for ease of reference. In addition, the logic models include a list of the measures used to determine whether the activities were carried out as planned (process measures), and whether program goals were met (outcome measures). The following Exhibit identifies the primary objectives of the prenatal and postnatal program components and the data source for measuring outcomes related to each objective. As noted in other sections of this report, some tools continue to be developed and refined and the logic models are used to help guide that process.

The outcome indicators reported annually include program impact on child abuse and neglect, parental stress and competence, health risk behaviors, parental depression, parent-child bonding, safety practices, medical and social service use, employment, education attainment, and others.

In the last couple of years, Healthy Families Arizona made some significant changes in the way it collects program process and outcome data. For example, the Parenting Stress Index was replaced by the Healthy Families Parenting Inventory (HFPI). More data has been collected using these newer measures and results are reported below.

For FY2006, the following outcomes were examined:

- Parent outcomes, e.g., parental stress, (i.e., results of the Healthy Families Parenting Inventory)
- Child Abuse and Neglect
- Child and Maternal health outcomes
- Safety in the home environment.

Exhibit 27. Program Objectives and Data Sources

Objective	Data Source
Increased Social Support Network	HFPI* Social Support Scale
Improved Mental Health	HFPI Depression Scale HFPI Personal Care Scale FSS-23** Services received
Increased Parents' Health Behaviors	FSS-23-Link to Medical Doctor Substance Abuse Screen (CRAFFT)
Increased Problem Solving Skills	HFPI Problem Solving Scale
Improved Family Stability	FSS-23—Employment, Education HFPI Mobilizing Resources Scale
Increased Parental Competence	HFPI Parental Competence Scale HFPI Parenting Efficacy Scale
Increased Positive Parent/Child Interaction	HFPI Parent/Child Behavior Scale
Improved Child Health	FSS-23 --Immunizations Link to Medical Doctor Safety Checklist
Optimized Child Development	HFPI—Parent child Interaction ASQ Screening
Prevention of child abuse and neglect	CHILDS Registry Check Total HFPI score
Increase empathy for the unborn child (prenatal)	HFPI-prenatal
Increase father involvement	HFPI—Commitment to Parent Role Father Involvement levels
Increase safety in the home environment	HFPI—Home environment Safety Checklist
Increase the delivery of healthy babies, free from birth complications	FSS-20P; FSS-23
Improve nutrition	In development

*Healthy Families Parenting Inventory

**FSS-23 is a Healthy Families Arizona tool developed to collect process and outcome data every six months.

Healthy Families Parenting Inventory (HFPI)

Two years ago, the evaluation team initiated the development of a new outcome instrument, the Healthy Families Parenting Inventory (HFPI) in place of the Parenting Stress Index. Various instruments have been used with other home visitation program evaluations that were ill equipped to capture the actual changes made by participants. Many of these instruments were not designed as *outcome instruments*, but rather as measures of concepts, e.g., family stress. By focusing on outcomes (i.e., changes) and by designing an instrument specifically for the Healthy Families program, we believe better outcome data can be generated for the evaluation.

The development of the HFPI was guided by several principles, not the least of which was the actual practice as conducted by home visitors in the Healthy Families Arizona program. Therefore, data was gathered directly from home visitors, supervisors, and experts. The final instrument includes 10 scales that have been tested for reliability. The final result is an inventory specific to Healthy Families that captures change initiated by the program and has good reliability data. The average reliability across the ten subscales is .83. (See Appendix D for specific reliability data).

Although the HFPI has been used for about two years, additional data on participants reveals significant changes from the two-month and six-month (n=723) as well as two-month and twelve-month (n=286) administration of the instrument. Exhibit 28 presents each subscale and the results of the statistical analysis of changes in parents from two months to six months and two to twelve months.

Exhibit 28. Healthy Families Parenting Inventory

Scale	Significant Improvement Baseline to 6 months	Significance (Effect Size**)	Significant Improvement Baseline to 12 months	Significance (Effect Size**)
Social Support		.054 (.06)	✔	.000* (.26)
Problem Solving	✔	.000* (.18)	✔	.000* (.37)
Depression	✔	.000* (.14)	✔	.000* (.29)
Personal Care	✔	.000 (.13)	✔	.000* (.26)
Mobilizing Resources	✔	.000* (.23)	✔	.000* (.52)
Commitment to Parent Role	✔	.001 (.12)		.079 (.11)
Parent/Child Behavior	✔	.000* (.15)	✔	.018* (.14)
Home Environment	✔	.000* (.30)	✔	.001* (.20)
Parenting Competence	✔	.000* (.29)	✔	.000* (.37)
Parenting Efficacy	✔	.000* (.20)		.227 (.07)
Total Scale	✔	.000* (.25)	✔	.000* (.32)

*Indicates a significant difference at the .05 level. Statistical significance indicates the results of the analysis could only be due to chance in 5 out of 100 cases.

**Effect size was computed using Cohen's *d*. Effect size estimates the magnitude of the change.

As Exhibit 28 shows, nine of the ten scales, plus the overall scale, showed a statistically significant difference in the families between the two month and six month administration of the instrument and eight of ten, plus the overall scale, were significantly different between baseline and 12 month reports. Families show significant improvement on most of the scales that in turn indicates improvements in healthy parenting. Overall, 63% of families showed positive change. This year we also examined the "effect size" of the

changes. Effect size is an estimate of the "amount" of change. Most social service programs produce effects that are considered "moderate" and these are roughly in the 0.1 to 0.2 range of effects (e.g., Gomby, 2005)[12]. The effect sizes in the HFPI results indicate modest effects and that the program's influence increases over time (i.e., the effect sizes are higher for the 12-month administration of the HFPI). The largest effect size occurs with mobilizing resources (i.e., 0.52), a result that supports the value placed by the program on serving as support for families in connecting and using resources. Other moderate effects are seen in the parenting competency at 6 months and problem solving scales at both 6 and 12 months. Smaller but consistent effects are reflected in improvements in depression, social support, home environment and personal care.

Continued revisions of the instrument, including refinement of the Spanish language translation and removing several items that contributed to lower reliability ratings, will be able to show even more precise levels of change. Next year's data will be able to be assessed for even longer term effects as additional administrations gain enough numbers on which to conduct the additional analyses.

Child Abuse and Neglect

The following exhibit presents data for families who were active in Healthy Families during the period of July 1, 2005 to June 30, 2006 and who had been in the program at least six months. The percent of families having a substantiated incidence of child abuse or neglect since entering the program is compared with the previous years' rates.

For the total families served by Healthy Families in FY2006, 99.24% had no substantiated reports of child abuse or neglect. However, this number should be interpreted with caution for several reasons. First, as noted in prior reports, child abuse and neglect rates may not be good measures about short-term program impact. For example, the rates reflect low-occurring events where small changes may not be representative of long-term effects. Second,

[12] More stringent interpretations of effect sizes consider 0.2 as "small" and 0.5 as "medium effects. Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences.* Hillsdale, NJ: LEA

it is well-known that many incidents of child abuse and neglect go unreported; this calls into question the reliability of the data available from the state database. These rates are determined by a process that requires a "match" on available information on the families such as mothers name, social security number and date of birth. When details for the match are missing, the accuracy of the match can decrease. Another explanation for lower numbers of substantiated reports is that the recording of "substantiated" is often delayed in the CPS system due to the time it takes to complete investigations and to go through appeals processes.

Exhibit 29. Percent of families showing NO child abuse and neglect incidences

Group	Percent without substantiated report 2003 (n=2022)	Percent without substantiated report 2004 (n=1568)	Percent without substantiated report 2005 (n=1814)	Percent without substantiated report 2006 (n=2780)
All Families	99.0	98.4	98.2	99.2
Comparison Group*	98.7	98.6	97.3	99.1

*Families who dropped out of the program before 4 home visits

Therefore, these data represent a one-year snapshot of information and the long-term patterns of outcomes may vary somewhat from what is reported here due to expected increases in the final assignment of "substantiated" categories. This challenge to the interpretation of the child abuse and neglect results lends support and importance to the longitudinal study that will provide more definite answers about ultimate outcomes as mentioned previously in this report.

Child Development and Wellness

Healthy Families Arizona maintains a process goal of completing administration of the Ages and Stages Questionnaire screening instrument with 80% of the children in families served by the program. Although only 59-69% of the children were screened this year (as indicated by the submitted

data), the ones that were screened and had scores within the cutoff range received appropriate referrals and support. For more detailed information, refer to the service delivery section of this report.

Safety Practices and Healthy Behaviors

Healthy Families Arizona seeks to promote safe environments for children through home visitors sharing information with families about important safety practices and monitoring the use of that information through completion of a safety checklist. These practices are important indicators for accident and injury prevention in homes and cars. As in past years, the home visitors successfully administered the safety checklist with more than 80% of the families in the program. The following exhibit shows the data for pre- and postnatal families in critical areas of safety as the child grows. The results show some increases from prior years for the 18- and 24-month data.

Exhibit 30. Percent of all families implementing safety practices

	2-Month (n=1073)	6-Month (n=1236)	12-Month (n=746)	18-Month (n=382)	24-Month (n=217)
Outlets Covered	45.8%	61.0%	76.0%	82.4%	81.9%
Poisons Locked	85.0%	90.0%	95.0%	96.3%	97.7%
Smoke Alarms	82.4%	90.5%	92.3%	90.2%	85.4%
Car seats	99.2%	99.4%	99.2%	99.2%	100%

The numbers of families implementing the various safety practices when the child is very young remains very similar, although slightly lower, compared to previous years. Continued attention to safety practices during the infant years is needed, particularly with smoke alarms, electrical outlets and poisons.

The program continues to excel in car safety seat use. There are improvements over last year in this area, particularly for toddlers. As in past years, appropriate safety practices increase steadily as the child becomes more mobile at 12-24 months. Additional data shows that as the child ages, more attention to safety is shown, e.g., 99.8% of families supervise their children during play, and 100% ensure pool safety.

Immunizations and Medical Homes

Promoting family members' health behaviors and child health are key objectives of both the prenatal and postnatal components of Healthy Families Arizona. The **immunization rate for the children** is one of the indicators used to measure this objective. Exhibit 31 shows the rate for the infants of Healthy Families participants for 2006, 2005 and 2004. This year's data shows that there has again been a slight decrease in immunizations at each period. Of particular concern is a decrease of 18% of the 6-month immunizations from prior reported levels. It is quite possible that this is a data collection problem due to new site startup and a lack of focus on documenting immunizations, or it could be that families are not getting the immunizations. Healthy Families supervisors and staff should continue to maintain high expectations and to encourage immunization completion and data submission. Overall, Healthy Families Arizona families continue to have their children immunized at a rate greater than the Arizona percentages.

Exhibit 31. Immunization Rate of Healthy Families Arizona Children

Immunization Period	Percent Immunized 2004	Percent Immunized 2005	Percent Immunized 2006	Immunization Rate for 2-year-olds in Arizona (2006)*
2 month	96.7%	92.7%	86.4%	
4 month	94.3%	90.2%	83.9%	
6 month	87.1%	82.3%	69.5%	
12 month	95.9%	92.1%	87.4%	
Received all 4 in the series by 18 months of age.	94.0%	89.1%	83.5%	79.0%

*Source: 2006 data from the Arizona Department of Health Services

Another indicator for the goal of ensuring the families receive adequate medical care is the ***percentage of children linked to a medical doctor***. The data reveal a substantial number of the children linked to a medical doctor.

Exhibit 32. Percentage of Children Linked to a Medical Doctor (Postnatal)

	6 months	12 months	18 months	24 months
Percent of children with medical home	97.5%	97.1%	96.4%	97.8%

Equally important to the need for quality care of the child is the need to ensure the *parent* receives appropriate health care. Health care for parents can contribute to better family planning and early identification of problems such as depression or domestic violence—all problems that affect the health and well-being of the entire family. This year, 75 percent of the parents report they have a primary care physician after they've been in the program eighteen months.

Mothers' Health, Education and Employment

The following results report on the health and well-being of participating mothers in outcomes such as subsequent pregnancies, education, and employment.

During the study period, 11.8% of the mothers who entered postnatally reported ***subsequent pregnancies,*** compared to 15% in 2004. Of these, 33.5% were 19 years or younger. Exhibit 33 shows the length of time to subsequent pregnancy for active families during each year. In examining the past three years, the number of mothers having another child within 12 months of their child has increased. The program staff should place increased emphasis on the risks and challenges associated with closely spaced pregnancies and the benefits of increased spacing.

Exhibit 33. Length Of Time To Subsequent Pregnancy

Length of Time to Subsequent Pregnancy	2004 Percent of mothers	2005 Percent of mothers	2006 Percent of mothers
1 to 12 mos.	31.6 %	33.3%	37.7%
13 to 24 mos.	42.3 %	42.3%	38.1%
Over 24 mos.	26.1 %	24.4%	24.2%

Parents who participate in Healthy Families Arizona may desire to complete or further their education. Home visitors can provide links and support to finish GED programs, or enroll in vocational or college education programs. Exhibit 34 displays the percentage of mothers enrolled in school full or part-time at different intervals. The results are slightly lower than reported in the past year.

Exhibit 34. Percent of Mothers enrolled in school (Postnatal only)

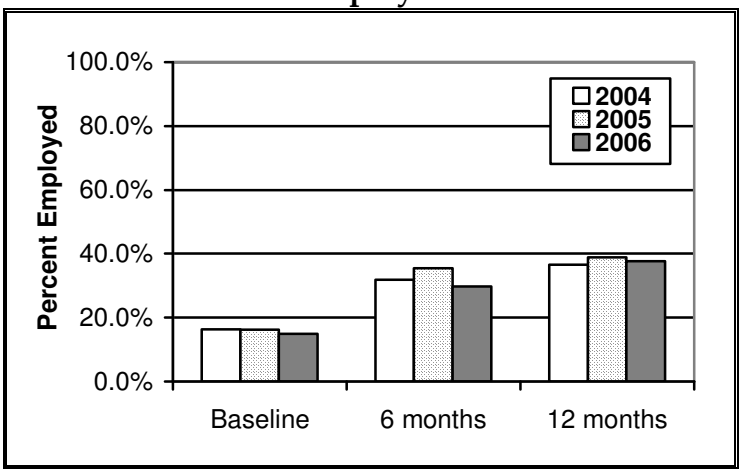
	Percent enrolled part-time 2005	Percent enrolled part-time 2006	Percent enrolled fulltime 2005	Percent enrolled fulltime 2006*
6 month	4.4%	**3.3%**	9.4%	**9.3%**
12 month	6.3%	**4.8%**	12.9%	**8.0%**
24month	5.0%	**3.5%**	7.8%	**8.8%**
36 month	6.3%	**5.8%**	8.4%	**2.9%**

* For 2006, data was available for 640 mothers at 6 months, 715 at 12 months, 226 at 24 months and 139 at 36 months

Exhibit 35 shows the ***employment status*** of mothers actively engaged in the program at various points in the program as compared to 2004 and 2005. While the mothers employed at baseline is similar to past years, those employed at six months show slight decreases from 2005, with 30% employed full or part-time at 6 months. The results have been relatively stable over the past several years. They also show a pattern of increase over time that indicates approximately 40% of the mothers in Healthy Families are working

approximately 12 months after their baby was born. This may be a partial explanation for length of time in the program that is, on average, approximately 14 months. This result may also indicate the importance of providing referral and support for helping mothers find quality child care.

Exhibit 35. Mother's employment status



Substance Abuse Screening

Alcohol and other substance abuse is a significant risk factor for child abuse and neglect. One of the primary roles of the home visitor include the identification and assessment of the possible influence by alcohol or other drug abuse on the family. They also educate the family about risky and healthy choices and can make referrals for support or treatment services if appropriate and available. The CRAFFT screening tool was chosen two years ago as a replacement of the CAGE, in hopes that it would screen effectively for substance abuse problems, while at the same time promoting communications. The brief alcohol and drug-screening test is known by a mnemonic, CRAFFT, based on the first letter of keywords in the 6 easy-to-remember questions.

The CRAFFT is a widely used assessment instrument and has acceptable reliability and validity data and was created particularly for use with young adults and adolescents. However, its continued use for the Healthy Families program is under review. It consists of a series of questions that are intended to allow the home visitor and parent to have a conversation about substance

use and abuse. A positive screen may not necessarily indicate a substance abuse problem or alcoholism, it could serve as a signal to Healthy Families staff about the need for further discussion or referral. Routine use of an appropriate screen may reduce the stigma associated with asking questions about substance use and, in turn, help families seek help more readily.

The data indicate that only 52-68% of the families are screened using the CRAFFT depending on the interval examined (6 months, 12 months, etc). This is a large increase from the 25-33% reported last year. Furthermore, of those who received the screen, 263 were noted as positive for drug use at 2 months, but none received a positive screen at other intervals. This is different from the "zero" who were screened positive at any level last year. This instrument was introduced in the prior year that was a period of rapid expansion. Review of its use also indicated dissatisfaction with the implementation and relevance for use with these families. Therefore, its continued use is currently under review and a possible alternative measure may be suggested. This represents a significant issue for the program, given the recent emphasis on substance abuse issues.

Recommendations

The Healthy Families Arizona expansion in the previous year has brought on new sites with continuing opportunities and challenges inherent in growth. The following table lists recommendations from last year's report that were suggested to help support program expansion.

Exhibit 36. 2005 Recommendations and Key Results from 2006

2005 Recommendations	Key Results from 2006
Enhance the evidence-based structure of the Healthy Families program.	Continuation of *Building Bridges* Newsletter; progress on longitudinal study
Develop standards for sites that set expectations for collecting and submitting data so that quarterly evaluation feedback reports are meaningful.	Data collection coordination is increasing, although additional attention is necessary; the program is currently designing a distance learning curriculum that will allow supervisors access to data collection training on an ongoing basis
The program needs to improve the administration of several of the evaluation instruments, in particular, the Safety Checklist and the Ages and Stages Questionnaire	Some increases in data received (e.g., safety practices, medical information); continued decreases or low rates in other elements, e.g., ASQ scores, identification numbers
Recruitment and retention in the program remains an ongoing concern. Specific recruitment and retention strategies should be developed.	Continues to be an issue; increased families engaged; decreased time in program; families are more widely varied in their time in program.

The program should identify specific strategies to meet the needs of families who have prior histories of child abuse and neglect.	Facilitating Changes, a concept based on Motivational Interviewing, has been added to the required training for all staff. It will be integrated with substance abuse information, domestic violence issues, and mental healthy training in 2007. Additional training and support has been made available with subject matter experts and consultants.
Continued program development is needed in delivering services to parents with multiple children at various ages and with families when the child is age 2 or older.	*Growing Great Kids* is developing an extension of their curriculum for families with children older than three years of age. In addition, the program has implemented two additional curricula, *Great Beginnings Start Before Birth* and *Partners for a Healthy Baby*.
The recruitment materials for the prenatal component of Healthy Families Arizona could be strengthened by development of attractive materials that clarify the services, goals and benefits of enrolling in Healthy Families during the prenatal period.	Additional changes have been made in this area; more sites and staff have access and training in relevant prenatal curricula
Linking families to needed resources is a key strategy in the Healthy Families model, but data collection forms do not seem to be capturing the types of referrals being made.	Revision of the referral form in process; results of the HFPI indicate that helping families increase their ability in *mobilizing resources* is a significant program outcome

Staff training and development is an important focus during this time of program expansion and staff are indicating a desire for relevant training.	Expansion in training offerings have been accomplished including web portal offerings, advanced core training, distance learning and teleconferences.
The revised HFAz logic model presents a framework for reviewing program activities and assuring the home visitors are engaging in activities that address each of the 10 objectives.	The logic model continues to be used to guide the evaluation planning and design; refinements to the model and program development changes will continue to be noted

2006 Recommendations

Recommendations based on 2006 evaluation activities include the following:

- It typically takes a year to integrate all of the HFAz components at a new program site. Particular attention can be given for a review of data collection training and follow-up support to improve data collection.
- Include in the next year's evaluation plan sub-studies that address these program elements and concerns:
    - What it means for participants to be on "outreach" and how this influences data collection and outcomes
    - Use and communication with families around the ASQ and ASQ-SE
- Consider ways to involve more FSSs in leadership roles; discuss with sites strategies for describing or increasing promotion opportunities.
- Explore ways to measure parent-child interactions and review the best ways to record child development progress.
- The program should focus mainly on core program activities and goals to improve critical elements as evidenced by indicators such as dosage, engagement in program, frequency of visits, and retention in program both for families and workers. Increases in positive outcomes can only occur when the program implementation is high quality.

In sum, the Healthy Families Arizona program reached more families in FY2006 than in past years. It successfully expanded its efforts to reach families before the birth of their babies. The program continues to help parents make significant changes in their parenting outcomes and home safety as reflected in the results of the Healthy Families Parenting Inventory and the safety practices checklist. Despite some challenges, e.g., staff turnover, the program has successfully met most of its goals around child and maternal health outcomes and child abuse and neglect rates. As the program continues to refine its expansion efforts, even more positive changes will likely result.

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Appendix A: Site Level Data[13]

[13] 2006 Site Changes: Two sites switched names during this program year. Therefore, South Phoenix and Tempe data should be interpreted as one site's worth of data.

Age of Child at Entry by Site - 2006
(Age in days)

Site	Mean (Age in Days)	Number	Standard Deviation
Douglas	15.22	79	13.11
Central Phoenix	28.85	97	25.06
Maryvale	23.68	88	24.42
South Phoenix	26.18	55	26.64
East Valley	25.87	78	18.63
Nogales	15.98	92	21.94
Page	24.63	30	19.80
Casa de los Niños	29.76	106	24.32
CODAC	33.20	117	25.62
La Frontera	30.76	123	28.10
Sierra Vista	16.20	56	16.50
Tuba City	26.67	39	25.51
Verde Valley	14.91	58	20.93
Yuma	17.55	75	16.19
Pascua Yaqui	26.43	44	21.89
Lake Havasu City	27.96	81	22.64
Flagstaff	27.23	40	26.17
Sunnyslope	22.43	75	16.67
Prescott	29.18	111	25.16
Pinal County	16.59	85	22.84
Mesa	28.28	124	21.93
Southeast Phoenix	25.35	98	25.57
El Mirage	31.45	82	28.20
Blake Foundation	34.30	93	25.38
Marana	37.80	65	26.72
Safford	39.67	24	40.77

Site	Mean (Age in Days)	Number	Standard Deviation
Stanfield	29.86	7	28.15
Apache Junction	28.89	46	25.59
Gila River	35.00	4	12.03
Winslow	42.42	12	26.73
Kingman	30.17	48	23.50
Globe/Miami	37.78	18	35.37
Kyrene	33.58	65	27.99
Metro Phoenix	28.00	73	26.14
Tolleson	21.14	73	20.08
South Mountain	27.98	81	23.68
Glendale	21.93	69	19.84
Deer Valley	27.19	72	25.46
East/SE Tucson	36.61	38	22.25
SW Tucson	35.33	66	26.59
Bullhead City	26.19	27	21.72
Northwest Phoenix	26.94	36	33.15
Tempe	31.23	53	24.71
Gilbert	29.51	65	25.75
Scottsdale	36.27	41	28.76
West Phoenix	28.73	66	27.56
East Mesa	35.43	61	27.15
Kinlani-Flagstaff	15.09	47	20.55
Total	27.17	3083	24.88

*Note: total does not include missing data for 102 participant files.

Days to Program Exit by Site - 2006
(For families who left the program)

Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Douglas	None				1036.00	1233.88	626.98	24
Central Phoenix	246.50	251.50	124.40	4	530.50	672.57	461.83	30
Maryvale	None				457.50	711.95	622.15	20
South Phoenix	261.00	259.67	56.01	3	276.50	545.00	561.20	10
East Valley	325.50	334.25	89.53	4	442.00	738.71	592.93	14
Nogales	305.00	305.00	16.97	2	500.00	900.48	674.40	27
Page	None				516.50	528.50	319.67	6
Casa de los Niños	367.00	367.00	315.37	2	560.50	749.62	610.61	34
CODAC	329.00	366.80	145.55	5	505.00	630.47	447.82	47
La Frontera	None				1368.00	1143.91	634.34	56
Sierra Vista	273.00	291.25	106.04	8	557.00	956.20	694.89	10
Tuba City	None				489.00	682.00	456.01	13
Verde Valley	272.00	270.53	109.09	15	598.50	722.50	603.52	16
Yuma	292.00	292.00	90.51	2	864.50	960.75	668.59	28
Pascua Yaqui	None				423.00	513.67	367.76	6
Lake Havasu City	294.00	282.25	36.54	4	488.00	726.93	563.71	28
Flagstaff	356.00	310.00	105.79	3	1050.00	940.38	594.29	13
Sunnyslope	386.00	396.33	25.15	3	543.50	772.96	601.52	26
Prescott	373.50	373.50	111.02	2	545.50	893.43	648.58	28
Pinal County	304.00	305.10	85.62	10	810.00	910.42	604.67	26
Mesa	435.00	404.00	65.28	3	1015.00	1019.20	525.16	35
Southeast Phoenix	234.50	234.50	99.70	2	649.50	829.50	650.24	26
El Mirage	303.00	303.00	0	1	386.50	662.71	622.30	24
Blake Foundation	277.00	277.00	15.56	2	321.00	429.33	334.89	24

Site	Prenatal				Postnatal			
	Median	Mean	Standard Deviation	Number	Median	Mean	Standard Deviation	Number
Marana	208.00	208.00	0	1	240.50	364.83	415.32	12
Safford	224.00	224.00	0	1	261.00	277.60	82.08	5
Stanfield	221.00	198.00	63.68	4	224.50	224.50	89.80	2
Apache Junction	303.00	322.25	134.67	4	253.50	248.00	64.21	6
Gila River	259.00	247.33	65.29	3	None			
Winslow	300.50	288.00	88.01	4	243.00	281.00	101.48	3
Kingman	301.00	301.00	0	1	351.00	356.67	116.96	6
Globe/Miami	188.00	196.67	31.90	3	233.00	242.17	51.97	6
Kyrene	373.50	373.50	116.67	2	350.00	408.80	405.43	15
Metro Phoenix	236.50	236.50	16.26	2	337.00	365.00	115.66	11
Tolleson	293.00	293.00	183.85	2	349.00	330.45	128.04	11
South Mountain	304.00	304.00	49.50	2	318.50	428.75	239.74	16
Glendale	358.00	358.00	0	1	424.50	641.25	552.69	8
Deer Valley	321.00	321.00	0	1	251.00	283.56	202.06	9
East/SE Tucson	239.00	268.60	167.16	5	279.00	265.89	88.98	9
SW Tucson	None				639.00	895.56	690.15	9
Bullhead City	295.00	295.00	0	1	242.00	252.33	66.11	3
N.W. Phoenix	604.00	604.00	0	1	403.50	403.50	48.79	2
Tempe	266.00	266.00	0	1	273.00	356.80	174.09	5
Gilbert	202.50	230.50	127.48	6	264.00	307.27	98.67	22
Scottsdale	217.00	217.00	0	1	206.00	192.33	55.77	3
West Phoenix	None				297.00	504.80	514.96	15
East Mesa	263.00	254.88	89.75	8	303.00	307.33	84.42	12
Kinlani-Flagstaff	363.50	351.17	80.72	6	443.00	806.11	701.89	9
Total	291.00	292.60	105.77	135	439.50	716.08	580.63	770

Top Three Reasons for Exit by Site - 2006
Percent and number ( ) within Site

Site	Overall (Prenatal and Postnatal Combined)		
	Did Not Respond to Outreach Efforts	Moved Away	Completed Program
Douglas	18.2% (4)	31.8% (7)	4.5% (1)
Central Phoenix	58.8% (20)	8.8% (3)	5.9% (2)
Maryvale	38.9% (7)	33.3% (6)	5.6% (1)
South Phoenix	38.5% (5)	7.7% (1)	7.7% (1)
East Valley	40.0% (6)	26.7% (4)	13.3% (2)
Nogales	17.2% (5)	34.5%(10)	20.7% (6)
Page	33.3% (3)	50.0% (3)	0
Casa de los Niños	41.7% (15)	13.9% (5)	13.9% (5)
CODAC	46.2% (24)	19.2% (10)	9.6% (5)
La Frontera	10.7% (6)	7.1% (4)	37.5% (21)
Sierra Vista	33.3% (6)	50.0% (9)	5.6% (1)
Tuba City	69.2% (9)	23.1% (3)	7.7% (1)
Verde Valley	35.5% (11)	32.3% (10)	12.9% (4)
Yuma	6.7% (2)	26.7% (8)	26.7% (8)
Pascua Yaqui	33.3% (2)	66.7% (4)	0
Lake Havasu City	25.0% (8)	18.8% (6)	9.4% (3)
Flagstaff	33.3% (5)	40.0% (6)	6.7% (1)
Sunnyslope	14.3% (4)	28.6% (8)	7.1% (2)
Prescott	26.7% (8)	30.0% (9)	30.0% (9)
Pinal County	22.9% (8)	17.1% (6)	5.7% (2)
Mesa	32.4% (12)	10.8% (4)	18.9% (7)
Southeast Phoenix	25.0% (7)	7.1% (2)	21.4% (6)
El Mirage	36.0% (9)	12.0% (3)	20.0% (5)
Blake Foundation	41.7% (10)	20.8% (5)	0
Marana	23.1% (3)	38.5% (5)	0
Safford	0	50.0% (3)	0

Site	Overall (Prenatal and Postnatal Combined)		
	Did Not Respond to Outreach Efforts	Moved Away	Completed Program
Stanfield (Pinal)	16.7% (1)	66.7% (4)	0
Apache Junction	0	40.0% (4)	0
Gila River	33.3% (10)	0	0
Winslow	28.6% (2)	14.3% (1)	0
Kingman	85.7% (6)	14.3% (1)	0
Globe/Miami	55.6% (5)	22.2% (2)	0
Kyrene	31.3% (5)	12.5% (2)	0
Metro Phoenix	30.8% (4)	46.2% (6)	0
Tolleson	33.3% (4)	58.3% (7)	0
South Mountain	35.3% (6)	11.8% (2)	0
Glendale	25.0% (2)	25.0% (2)	12.5% (1)
Deer Valley	0	44.4% (4)	0
East/SE Tucson	21.4% (3)	14.3% (2)	0
SW Tucson	22.2% (2)	55.6% (5)	0
Bullhead City	50.0% (2)	50.0% (2)	0
Northwest Phoenix	33.3% (1)	0	0
Tempe	50.0% (3)	16.7% (1)	0
Gilbert	50.0% (13)	19.2% (5)	0
Scottsdale	0	25.0% (1)	0
West Phoenix	26.7% (4)	20.0% (3)	6.7% (1)
East Mesa	36.8% (7)	26.3% (5)	0
Kinlani-Flagstaff	13.3% (2)	26.7% (4)	20.0% (3)
Total	30.7% (271)	23.4% (207)	11.1% (98)

Health Insurance by Site at Intake - 2006
Percent and number ( ) within Site*

Site	PRENATAL			POSTNATAL		
	None	AHCCCS	Private	None	AHCCCS	Private
Douglas	7.7% (1)	84.6% (11)	0	1.2% (1)	95.1% (77)	3.7% (3)
Central Phoenix	0	100% (9)	0	1.0% (1)	89.9% (89)	7.1% (7)
Maryvale	9.1% (1)	81.8% (9)	0	4.5% (4)	91% (81)	3.4% (3)
South Phoenix	8.3% (1)	83.3% (10)	8.3% (1)	0	91.4% (53)	6.9% (4)
East Valley	0	92.3% (12)	7.7% (1)	0	87.8% (72)	12.2% (10)
Nogales	40.0% (4)	50.0% (5)	0	1.0% (1)	95.8% (92)	3.1% (3)
Page	16.7% (1)	83.3% (5)	0	0	100% (30)	0
Casa de los Niños	0	100% (16)	0	0.9% (1)	95.3% (102)	3.7% (4)
CODAC	5.6% (1)	88.9% (16)	5.6% (1)	1.7% (2)	94.0% (109)	3.4% (4)
La Frontera	0	93.3% (14)	6.7% (1)	4.0% (5)	90.3% (112)	4.8% (6)
Sierra Vista	0	81.0% (17)	19.0% (4)	1.9% (1)	84.6% (44)	7.7% (4)
Tuba City	0	90.9% (10)	0	4.9% (2)	90.2% (37)	2.4% (1)
Verde Valley	7.5% (5)	74.6% (50)	17.9% (12)	3.5% (2)	86.0% (49)	8.8% (5)
Yuma	16.7% (1)	83.3% (5)	0	5.3% (4)	94.7% (71)	0
Pascua Yaqui	0	92.6% (25)	0	0	95.7% (44)	0
Lake Havasu City	13.6% (3)	72.7% (16)	9.1% (2)	3.7% (3)	92.7% (76)	3.7% (3)
Flagstaff	27.3% (9)	66.7% (22)	0	4.8% (2)	81.0% (34)	14.3% (6)
Sunnyslope	22.2% (2)	77.8% (7)	0	3.8% (3)	82.5% (66)	12.5% (10)
Prescott	10.0% (2)	80.0% (16)	10.0% (2)	1.8% (2)	84.7% (94)	9.0% (10)
Pinal County	7.7% (1)	76.9% (10)	7.7% (1)	2.3% (2)	85.2% (75)	10.2% (9)
Mesa	0	81.0% (17)	14.3% (3)	4.1% (5)	87.2% (108)	7.3% (9)
Southeast Phoenix	7.7% (1)	92.3% (12)	0	5.1% (5)	86.7% (85)	8.2% (8)
El Mirage	28.4% (4)	71.4% (10)	0	2.4% (2)	71.8% (61)	22.4% (19)
Blake Foundation	7.1% (1)	78.6% (11)	7.1% (1)	3.2% (3)	89.4% (84)	7.4% (7)
Marana	0	100% (7)	0	4.5% (3)	87.9% (58)	6.1% (4)
Safford	0	71.4% (5)	14.3% (1)	0	90.5% (19)	9.5% (2)
Stanfield	20.0% (2)	70.0% (7)	10.0% (1)	0	100% (7)	0
Apache Junction	5.9% (2)	85.3% (29)	8.8% (3)	2.1% (1)	76.6% (36)	17% (8)

Site	PRENATAL			POSTNATAL		
	None	AHCCCS	Private	None	AHCCCS	Private
Gila River	0	92.3% (12)	7.7% (1)	0	100% (4)	0
Winslow	0	100% (10)	0	0	100% (17)	0
Kingman	10.0% (1)	90.0% (9)	0	4.0% (2)	82.0% (41)	14.0% (7)
Globe/Miami	0	100% (9)	0	0	90.9% (20)	9.1% (2)
Kyrene	10.0% (2)	80.0% (16)	10% (2)	0	77.6% (52)	20.9% (4)
Metro Phoenix	14.3% (2)	78.6% (11)	7.1% (1)	4.1% (3)	93.2% (69)	2.7(2)
Tolleson	7.7% (1)	84.6% (11)	0	4.1% (3)	82.4% (61)	13.5% (10)
South Mountain	0	86.7% (13)	13.3% (2)	0	88.0% (73)	10.8% (9)
Glendale	0	87.5% (7)	12.5% (1)	1.4% (1)	85.9% (61)	9.9% (7)
Deer Valley	33.3% (3)	55.6% (5)	11.1% (1)	2.7% (2)	83.6% (61)	11.0% (8)
East/SE Tucson	12.5% (1)	75.0% (6)	12.5% (1)	0	90.0% (36)	10.0% (4)
SW Tucson	12.5% (1)	87.5% (7)	0	4.3% (3)	89.9% (62)	5.8% (4)
Bullhead City	0	88.9% (8)	11.1% (1)	3.3% (1)	90.0% (27)	6.7% (2)
Northwest Phoenix	7.1% (1)	85.7% (12)	7.1% (1)	0	89.2% (33)	8.1% (3)
Tempe	4.3% (1)	91.3% (21)	4.3% (1)	1.9% (1)	86.8% (46)	11.3% (6)
Gilbert	0	100% (20)	0	0	86.6% (58)	11.9% (8)
Scottsdale	0	87.5% (7)	12.5% (1)	0	72.1% (31)	27.9% (12)
West Phoenix	0	80.0% (8)	20.0% (2)	1.6% (1)	90.6% (58)	7.8% (5)
East Mesa	6.9% (2)	93.1% (27)	0	0	95.5% (63)	3.0% (2)
Kinlani-Flagstaff	7.7% (2)	84.6% (22)	3.8% (1)	2.2% (1)	88.9% (40)	6.7% (3)
Total	7.9% (59)	83.4% (624)	6.7% (50)	2.3% (73)	88.3% (2778)	8.2% (257)

***"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 Intake
2006 by Site
Percent and number ( ) within Site

Site	PRENATAL			POSTNATAL		
	True	False	Unknown	True	False	Unknown
Douglas	38.5% (5)	61.5% (8)	0	43.2% (35)	50.6% (41)	6.2% (5)
Central Phoenix	33.3% (3)	66.7% (6)	0	40.4% (40)	56.6% (56)	3.0% (3)
Maryvale	23.1% (3)	69.2% (9)	7.7% (1)	31.8% (28)	67.0% (59)	1.1% (1)
South Phoenix	25.0% (3)	75.0% (9)	0	44.8% (26)	50.0% (29)	5.2% (3)
East Valley	28.6% (4)	71.4% (10)	0	43.4% (36)	54.2% (45)	2.4% (2)
Nogales	22.2% (2)	77.8% (7)	0	48.5% (47)	47.4% (46)	4.1% (4)
Page	0	100% (6)	0	33.3% (10)	66.7% (20)	0
Casa de los Niños	25.0% (4)	75.0% (12)	0	29.9% (32)	66.4% (71)	3.7% (4)
CODAC	40.0% (8)	60.0% (12)	0	27.6% (32)	69.8% (81)	2.6% (3)
La Frontera	31.3% (5)	68.8% (11)	0	35.2% (44)	6.00% (75)	4.8% (6)
Sierra Vista	22.7% (5)	77.3% (17)	0	28.1% (16)	68.4% (39)	3.5% (2)
Tuba City	36.4% (4)	63.6% (7)	0	36.6% (15)	61.0% (25)	2.4% (1)
Verde Valley	12.1% (8)	86.4% (57)	1.5% (1)	44.8% (26)	51.7% (30)	3.4% (2)
Yuma	50.0% (3)	50.0% (3)	0	48.7% (37)	50.0% (38)	1.3% (1)
Pascua Yaqui	10.3% (3)	89.7% (26)	0	8.5% (4)	91.5% (43)	0
Lake Havasu City	31.8% (7)	63.6% (14)	4.5% (1)	30.9% (25)	63.0% (51)	6.2% (5)
Flagstaff	38.2% (13)	52.9% (18)	8.8% (3)	31% (13)	69.0% (29)	0
Sunnyslope	36.4% (4)	63.6% (7)	0	30.4% (24)	68.4% (54)	1.3% (1)
Prescott	40.0% (8)	55.0% (11)	5% (1)	41.4% (46)	56.3% (63)	2.7% (3)
Pinal County	53.8% (7)	46.2% (6)	0	50.0% (44)	50.0% (44)	0
Mesa	22.7% (5)	72.7% (16)	4.5% (1)	31.7% (40)	61.9% (78)	6.3% (8)
Southeast Phoenix	23.1% (3)	69.2% (9)	7.7% (1)	46.5% (46)	52.5% (52)	1.0% (1)
El Mirage	50.0% (7)	42.9% (6)	7.1% (1)	28.2% (24)	68.2% (58)	3.5% (3)
Blake Foundation	28.6% (4)	71.4% (10)	0	31.5% (29)	64.1% (59)	4.3% (4)
Marana	14.3% (1)	85.7% (6)	0	37.9% (25)	60.6% (40)	1.5% (1)
Safford	9.1% (1)	90.9% (10)	0	8.7% (2)	91.3% (21)	0
Stanfield	66.7% (6)	33.3% (3)	0	100% (7)	0	0
Apache Junction	35.3% (12)	64.7% (22)	0	40.4% (19)	57.4% (27)	2.1% (1)

Site	PRENATAL			POSTNATAL		
	True	False	Unknown	True	False	Unknown
Gila River	41.7% (5)	58.3% (7)	0	25.0% (1)	75.0% (3)	0
Winslow	66.7% (6)	33.3% (3)	0	31.3% (5)	68.8% (11)	0
Kingman	40.0% (4)	60.0% (6)	0	16.7% (8)	54.2% (26)	29.2% (14)
Globe/Miami	44.4% (4)	55.6% (5)	0	26.1% (6)	69.6% (16)	4.3% (1)
Kyrene	55.0% (11)	40.0% (8)	5.0% (1)	33.3% (23)	63.8% (44)	2.9% (2)
Metro Phoenix	21.4% (3)	71.4% (10)	7.1% (1)	33.8% (25)	64.9% (48)	1.4% (1)
Tolleson	42.9% (6)	57.1% (8)	0	33.3% (25)	64.0% (48)	2.7% (2)
South Mountain	26.7% (4)	66.7% (10)	6.7% (1)	39.3% (33)	58.3% (49)	2.4% (2)
Glendale	37.5% (3)	62.5% (5)	0	32.4% (23)	67.6% (48)	0
Deer Valley	44.4% (4)	55.6% (5)	0	26.4% (19)	72.2% (52)	1.4% (1)
East/SE Tucson	37.5% (3)	62.5% (5)	0	40.0% (16)	57.5% (23)	2.5% (1)
SW Tucson	44.4% (4)	55.6% (5)	0	40.6% (28)	58.0% (40)	1.4% (1)
Bullhead City	33.3% (3)	66.7% (6)	0	40.6% (13)	46.9% (15)	12.5% (4)
Northwest Phoenix	21.4% (3)	71.4% (10)	7.1% (1)	25.0% (9)	72.2% (26)	2.8% (1)
Tempe	54.2% (13)	41.7% (10)	4.2% (1)	48.1% (25)	48.1% (25)	3.8% (2)
Gilbert	20.0% (4)	70.0% (14)	10.0% (2)	40.9% (27)	57.6% (38)	1.5% (1)
Scottsdale	0	87.5% (7)	12.5% (1)	29.5% (13)	63.6% (28)	6.8% (3)
West Phoenix	33.3% (3)	66.7% (6)	0	21.2% (14)	77.3% (51)	1.5% (1)
East Mesa	51.6% (16)	48.4% (15)	0	55.4% (36)	40.0% (26)	4.6% (3)
Kinlani-Flagstaff	29.6% (8)	70.4% (19)	0	29.8% (14)	70.2% (33)	0
Total	32.0% (245)	65.6% (502)	2.4% (18)	35.9% (1135)	60.86% (1924)	3.3% (104)

PRENATAL Ethnicity of Mother by Site - 2006
Percent and number ( ) within Site

Site	Mixed/Other	Caucasian/ White	Hispanic	African American	Asian American	Native American
Douglas	0	15.4% (2)	76.9% (10)	0	0	7.7% (1)
Central Phoenix	11.1% (1)	33.3% (3)	33.3% (3)	22.2% (2)	0	0
Maryvale	7.7% (1)	7.7% (1)	84.6% (11)	0	0	0
South Phoenix	8.3% (1)	8.3% (1)	41.7% (5)	41.7% (5)	0	0
East Valley	7.1% (1)	35.7% (3)	42.9% (6)	14.3% (2)	0	0
Nogales	0	10.0% (1)	90.0% (9)	0	0	0
Page	0	25.0% (1)	0	0	0	75.0% (3)
Casa de los Niños	6.3% (1)	18.8% (3)	68.8% (11)	6.3% (1)	0	0
CODAC	15.8% (3)	10.5% (2)	57.9% (11)	10.5% (2)	0	0
La Frontera	0	25% (4)	75.0% (12)	0	0	0
Sierra Vista	0	54.5% (12)	31.8% (7)	13.6% (3)	0	0
Tuba City	0	0	0	18.2% (2)	0	81.8% (9)
Verde Valley	3% (2)	64.2% (43)	29.9% (20)	0	0	3.0% (2)
Yuma	0	20.0% (1)	80.0% (4)	0	0	0
Pascua Yaqui	10.3% (3)	0	6.9% (2)	0	3.4% (1)	72.4% (21)
Lake Havasu City	9.1% (2)	59.1% (13)	22.7 (5)	0	4.5% (1)	4.5% (1)
Flagstaff	5.9% (2)	17.6% (6)	44.1% (15)	5.9% (2)	0	23.5% (8)
Sunnyslope	0	30.0% (3)	60.0% (6)	10.0% (1)	0	0
Prescott	5.0% (1)	70% (14)	25.0% (5)	0	0	0
Pinal County	15.4% (2)	15.4% (2)	61.5% (8)	7.7% (1)	0	0
Mesa	0	40.9% (9)	54.5% (12)	0	0	4.5% (1)
Southeast Phoenix	0	7.1% (1)	57.1% (8)	28.6% (4)	0	7.1% (1)
El Mirage	21.4% (3)	7.1% (1)	71.4% (10)	0	0	0
Blake Foundation	7.1% (1)	0	71.4% (10)	7.1% (1)	7.1% (1)	7.1% (1)
Marana	14.3% (1)	42.9% (3)	42.9% (3)	0	0	0
Safford	9.1% (1)	45.5% (5)	45.5% (5)	0	0	0
Stanfield	0	40.0% (4)	40.0% (4)	10.0% (1)	10.0% (1)	0
Apache Junction	0	72.7% (24)	24.2% (8)	3.0% (1)	0	0
Gila River	0	0	0	0	0	100% (13)
Winslow	10.0% (1)	30.0% (3)	30.0% (3)	0	0	30.0% (3)

Site	Mixed/Other	Caucasian/ White	Hispanic	African American	Asian American	Native American
Kingman	0	90% (9)	10.0% (1)	0	0	0
Globe/Miami	0	22.2% (2)	55.6% (5)	0	0	22.2% (2)
Kyrene	0	15.0% (3)	60.0% (12)	5.0% (1)	0	20% (4)
Metro Phoenix	0	21.4% (3)	78.6% (11)	0	0	0
Tolleson	0	0	100% (14)	0	0	0
South Mountain	13.3% (2)	20.0% (3)	60.0% (9)	6.7% (1)	0	0
Glendale	0	37.5% (3)	37.5% (3)	12.5% (1)	0	0
Deer Valley	0	44.4% (4)	55.6% (5)	0	0	0
East/SE Tucson	0	50.0% (4)	12.5% (1)	25.0% (2)	12.5% (1)	0
SW Tucson	11.1% (1)	0	89.9% (8)	0	0	0
Bullhead City	0	62.5% (5)	37.5% (3)	0	0	0
Northwest Phoenix	14.3% (2)	14.3% (2)	64.3% (9)	0	7.1% (10)	0
Tempe	8.3% (2)	29.2% (7)	41.7% (10)	20.8% (5)	0	0
Gilbert	5.0% (1)	50% (10)	15.0% (3)	20.0% (4)	0	5.0% (1)
Scottsdale	0	25.0% (2)	25.0% 2)	25.0% (2)	12.5% (1)	12.5% (1)
West Phoenix	0	20.0% (2)	60.0% (6)	20.0% (2)	0	0
East Mesa	0	23.3% (7)	73.3% (22)	0	0	0
Kinlani-Flagstaff	3.7% (1)	22.2% (6)	51.9% (14)	0	0	22.2% (6)
Total	4.7% (36)	31.3% (239)	45.9% (351)	6.0% (46)	2.2% (17)	10.2% (78)

POSTNATAL Ethnicity of Mother by Site - 2006
(Percent and number within Site)

Site	Mixed/Other	White/ Caucasian	Hispanic	African American	Asian American	Native American
Douglas	1.2% (1)	4.9% (4)	88.8% (79)	1.2% (1)	0	0
Central Phoenix	3.1% (3)	18.4% (18)	65.3% (64)	8.2% (8)	1.0% (1)	3.1% (3)
Maryvale	0	12.2% (11)	71.1% (64)	10.0% (9)	0	4.4% (4)
South Phoenix	7.0% (4)	14.0% (8)	61.4% (35)	12.3% (7)	0	0
East Valley	1.3% (1)	27.5% (22)	58.8% (47)	7.5% (6)	0	3.8% (3)
Nogales	0	0	99% (96)	0	0	1.0% (1)
Page	3.4% (1)	3.4% (1)	3.4% (1)	3.4% (1)	0	86.2% (25)
Casa de los Niños	2.8% (3)	17.0% (18)	70.8% (75)	3.8% (4)	1.9% (2)	3.8% (4)
CODAC	4.3% (5)	18.8% (22)	69.2% (81)	6.0% (7)	0	1.7% (2)
La Frontera	6.4% (8)	15.2% (19)	70.4% (88)	4.0% (5)	0	4.0% (5)
Sierra Vista	10.5% (6)	56.1% (32)	29.8% (17)	3.5% (2)	0	0
Tuba City	2.4% (1)	0	0	0	0	95.1% (39)
Verde Valley	0	53.4% (31)	37.9% (22)	1.7% (1)	0	6.9% (4)
Yuma	0	9.1% (6)	84.8% (56)	3.0% (2)	3.0% (2)	0
Pascua Yaqui	23.4% (11)	4.3% (2)	10.6% (5)	2.1% (1)	0	59.6% (28)
Lake Havasu City	2.5% (2)	49.4% 40)	43.2% (35)	1.2% (1)	0	3.7% (3)
Flagstaff	2.4% (1)	26.2% (11)	33.3% (14)	0	2.4% (1)	35.7% (15)
Sunnyslope	3.8% (3)	44.3% (35)	41.8% (33)	8.9% (7)	0	1.3% (1)
Prescott	1.8% (2)	53.6% (60)	42.0% (47)	0	0.9% (1)	1.8% (2)
Pinal County	2.3% (2)	22.1% (19)	57.0% (49)	10.5% (9)	0	8.1% (7)
Mesa	5.6% (7)	40.5% (51)	46.0% (58)	3.2% (4)	0	4.0% (5)
Southeast Phoenix	5.2% (5)	10.3% (10)	69.0% (67)	10.3% (10)	1.0% (1)	4.1% (4)
El Mirage	8.3% (7)	39.3% (33)	44.0% (37)	8.3% (7)	0	0
Blake Foundation	0	22.6% (21)	66.7% (62)	8.6% (8)	0	2.2% (2)
Marana	7.6% (5)	42.4% (28)	42.4% (28)	4.5% (3)	1.5% (1)	1.5% (1)
Safford	0	78.3% (18)	21.7% (5)	0	0	0
Stanfield	0	14.3% (1)	42.9% (3)	14.3% (1)	0	28.6% (2)
Apache Junction	0	66.7% (30)	28.9% (13)	2.2% (1)	2.2% (1)	0
Gila River	0	0	0	0	0	100% (4)
Winslow	5.9% (1)	17.6% (3)	17.6% (3)	11.8% (2)	0	41.2% (7)

Site	Mixed/Other	White/ Caucasian	Hispanic	African American	Asian American	Native American
Kingman	11.1% (5)	71.1% (32)	15.6% (7)	0	2.2% (1)	0
Globe/Miami	0	25.0% (5)	20.0% 4)	5.0% (1)	0	45.0% (9)
Kyrene	0	34.8% (24)	58.0% (40)	4.3% (3)	1.4% (1)	1.4% (1)
Metro Phoenix	1.4% (1)	10.8% (8)	77.0% (57)	9.5% (7)	0	1.4% (1)
Tolleson	0	8.0% (6)	72% (54)	9.3% (7)	0	10.7% (8)
South Mountain	3.6% (3)	13.1% (11)	70.2% (59)	11.9% (10)	0	1.2% (1)
Glendale	2.9% (2)	25.7% (18)	54.3% (38)	15.7% (11)	0	1.4% (1)
Deer Valley	4.2% (3)	33.1% (24)	55.6% (40)	2.8% (2)	0	4.2% (3)
East/SE Tucson	5.0% (2)	60.0% (24)	30.0% (12)	5.0% (2)	0	0
SW Tucson	3.0% (2)	9.0% (6)	82.1% (55)	1.5% (1)	1.5% (1)	3.0% (2)
Bullhead City	3.3% (1)	63.3% (19)	33.3% (10)	0	0	0
Northwest Phoenix	2.8% (1)	25.0% (9)	63.9% (23)	5.6% (2)	0	2.8% (1)
Tempe	7.3% (4)	18.2% (10)	56.4% (31)	9.1% (5)	0	9.1% (5)
Gilbert	4.5% (3)	45.5% (30)	43.9% (29)	1.5% (1)	3.0% (2)	1.5% (1)
Scottsdale	9.1% (4)	43.2% (19)	34.1% (15)	2.3% (1)	2.3% (1)	9.1% (4)
West Phoenix	7.7% (5)	13.8% (9)	64.6% (42)	12.3% (8)	0	0
East Mesa	0	21.2% (14)	72.7% 48)	4.5% (3)	0	1.5% (1)
Kinlani-Flagstaff	2.2% (1)	17.4% (8)	50.0% (23)	4.3% (2)	0	23.9% (11)
Total	3.7% (116)	26.5% (830)	56.4% (1767)	5.5% (173)	0.5% (16)	7.0% (220)

Gestational Age by Site - 2006
(Number and Percent within Site)
Was the gestational age less than 37 weeks?

Site	PRENATAL		POSTNATAL	
	No	Yes	No	Yes
Douglas	No data	No data	84.3% (43)	15.7% (8)
Central Phoenix	100% (5)	0	76.8% (53)	23.2% (16)
Maryvale	57.1% (4)	42.9% (3)	83.6% (56)	16.4% (11)
South Phoenix	85.7% (6)	14.3% (1)	81.0% (34)	19.0% (8)
East Valley	75.0% (3)	25.0% (1)	67.1% (47)	32.9% (23)
Nogales	100% (4)	0	85.0% (68)	15.0% (12)
Page	100% (3)	0	100% (28)	0
Casa de los Niños	100% (7)	0	80.0% (72)	20.0% (18)
CODAC	80.0% (8)	20.0% (2)	87.1% (81)	12.9% (12)
La Frontera	83.3% (5)	16.7% (1)	80.6% (87)	19.4% (21)
Sierra Vista	70.0% (7)	30.0% (3)	92.7% (38)	7.3% (3)
Tuba City	100% (6)	0	94.1% (32)	5.9% (2)
Verde Valley	87.8% (36)	12.2% (5)	85.7% (48)	14.3% (8)
Yuma	66.7% (2)	33.3% (1)	89.1% (49)	10.9% (6)
Pascua Yaqui	80.0% (4)	20.0% (1)	91.4% (32)	8.6% (3)
Lake Havasu City	92.9% (13)	7.1% (1)	93.2% (69)	6.8% (5)
Flagstaff	95.8% (23)	4.2% (1)	78.1% (25)	21.9% (7)
Sunnyslope	75.0% (3)	25.0% (1)	75.4% (46)	24.6% (15)
Prescott	80.0% (12)	20.0% (3)	88.2% (90)	11.8% (12)
Pinal County	90.9% (10)	9.1% (1)	92.3% (60)	7.7% (5)
Mesa	66.7% (4)	33.3% (2)	66.7% (68)	33.3% (34)
Southeast Phoenix	50.0% (3)	50.0% (3)	78.7% (59)	21.3% (16)
El Mirage	80.0% (4)	20.0% (1)	74.6% (44)	25.4% (15)
Blake Foundation	100% (8)	0	84.4% (65)	15.6% (12)
Marana	60.0% (3)	40.0% (2)	72.7% (40)	27.3% (15)
Safford	100% (2)	0	100% (1)	0

Site	PRENATAL		POSTNATAL	
	No	Yes	No	Yes
Stanfield	100% (4)	0	80.0% (4)	20.0% (1)
Apache Junction	50.0% (4)	50.0% (4)	87.9% (29)	12.1% (4)
Gila River	88.9% (8)	11.1% (1)	100% (3)	0
Winslow	100% (3)	0	75.0% (9)	25.0% (3)
Kingman	100% (2)	0	95.5% (21)	4.5% (1)
Globe/Miami	50.0% (1)	50.0% (1)	88.9% (8)	11.1% (1)
Kyrene	83.3% (5)	16.7% (1)	73.1% (38)	26.9% (14)
Metro Phoenix	75.0% (6)	25.0% (2)	78.0% (39)	22.0% (11)
Tolleson	25.0% (1)	75.0% (3)	90.4% (47)	9.6% (5)
South Mountain	100% (2)	0	80.3% (49)	19.7% (12)
Glendale	100% (3)	0	80.0% (44)	20.0% (11)
Deer Valley	100% (1)	0	81.3% (39)	18.8% (9)
East/SE Tucson	80.0% (4)	20.0% (1)	71.4% (20)	28.6% (8)
SW Tucson	50.0% (1)	50.0% (1)	85.2% (52)	14.8% (9)
Bullhead City	100% (1)	0	62.5% (5)	37.5% (3)
Northwest Phoenix	100% (2)	0	65.2% (15)	34.8% (8)
Tempe	100% (4)	0	72.7% (32)	27.3% (12)
Gilbert	81.3% (13)	18.8% (3)	62.3% (33)	37.7% (20)
Scottsdale	No data	No data	71.9% (23)	28.1% (9)
West Phoenix	75.0% (3)	25.0% (1)	70.8% (34)	29.2% (14)
East Mesa	85.7% (12)	14.3% (2)	77.8% (42)	22.2% (12)
Kinlani-Flagstaff	69.2% (9)	30.8% (4)	88.5% (23)	11.5% (3)
Total	82.8% (274)	17.2% (57)	81.0% (1944)	19.0% (457)

Low Birth Weight by Site - 2006
(Number and Percent within Site)
Did the child have low birth weight?
(less than 2500 grams, 88 ounces or 5.5 pounds)

Site	PRENATAL		POSTNATAL	
	No	Yes	No	Yes
Douglas	100% (1)	0	87.5% (70)	12.5% (10)
Central Phoenix	100% (5)	0	82.8% (82)	17.2% (17)
Maryvale	88/9% (8)	11.1% (1)	86.7% (78)	13.3% (12)
South Phoenix	87.5% (7)	12.5% (1)	82.8% (48)	17.2% (10)
East Valley	100% (4)	0	79.2% (61)	20.8% (16)
Nogales	100% (6)	0	92.8% (90)	7.2% (7)
Page	100% (3)	0	96.7% (29)	3.3% (1)
Casa de los Niños	66.7% (4)	33.3% (2)	90.5% (95)	9.5% (10)
CODAC	86.7% (13)	13.3% (2)	90.4% (103)	9.6% (11)
La Frontera	88.9% (8)	11.1% (1)	83.1% (103)	16.9% (21)
Sierra Vista	89.5% (17)	10.5% (2)	91.2% (52)	8.8% (5)
Tuba City	66.7% (6)	33.3% (3)	95.1% (39)	4.9% (2)
Verde Valley	97.7% (42)	2.3% (1)	84.5% (49)	15.5% (9)
Yuma	100% (3)	0	92.1% (70)	7.9% (6)
Pascua Yaqui	75.0% (6)	25.0% (2)	95.6% (43)	4.4% (2)
Lake Havasu City	88.9% (16)	11.1% (2)	91.5% (75)	8.5% (7)
Flagstaff	88% (22)	12% (3)	71.4% (30)	28.6% (12)
Sunnyslope	100% (5)	0	83.5% (66)	16.5% (13)
Prescott	82.4% (14)	17.6% (3)	88.4% (99)	11.6% (13)
Pinal County	100% (11)	0	94.2% (81)	5.8% (5)
Mesa	83.3% (5)	16.7% (1)	79.7% (98)	20.3% (25)
Southeast Phoenix	85.7% (6)	14.3% (1)	87.6% (85)	12.4% (12)
El Mirage	100% (8)	0	86.7% (72)	13.3% (11)
Blake Foundation	88.9% (8)	11.1% (1)	85.7% (78)	14.3% (13)
Marana	50.0% (2)	50.0% (2)	83.3% (55)	16.7% (11)
Safford	80.0% (4)	20.0% (1)	83.3% (20)	16.7% (4)
Stanfield	85.7% (6)	14.3% (1)	71.4% (5)	28.6% (2)

Site	PRENATAL		POSTNATAL	
	No	Yes	No	Yes
Apache Junction	90.0% (9)	10.0% (1)	89.4% (42)	10.6% (5)
Gila River	80.0% (8)	20.0% (2)	100% (4)	0
Winslow	100% (2)	0	94.1% (16)	5.9% (1)
Kingman	100% (2)	0	84.8% (39)	15.2% (7)
Globe/Miami	100% (5)	0	85.0% (17)	15.0% (3)
Kyrene	90.0% (9)	10.0% (1)	84.6% (55)	15.4% (10)
Metro Phoenix	80.0% (8)	20.0% (2)	91.7% (66)	8.3% (6)
Tolleson	50.0% (2)	50.0% (2)	89.0% (65)	11.0% (8)
South Mountain	80.0% (4)	20.0% (1)	86.7% (72)	13.3% (11)
Glendale	100% (3)	0	82.6% (57)	17.4% (12)
Deer Valley	100% (1)	0	87.3% (62)	12.7% (9)
East/SE Tucson	85.7% (6)	14.3% (1)	84.2% (32)	15.8% (6)
SW Tucson	80.0% (4)	20.0% (1)	89.9% (62)	10.1% (7)
Bullhead City	100% (1)	0	73.1% (19)	26.9% (7)
Northwest Phoenix	100% (5)	0	80.6% (29)	19.4% (7)
Tempe	100% (4)	0	83.6% (46)	16.4% (9)
Gilbert	75.0% (12)	25.0% (4)	78.5% (51)	21.5% (14)
Scottsdale	50.0% (1)	50.0% (1)	85.7% (36)	14.3% (6)
West Phoenix	100% (4)	0	83.1% (54)	16.9% (11)
East Mesa	92.9% (13)	7.1% (1)	84.1% (53)	15.9% (10)
Kinlani-Flagstaff	100% (16)	0	88.9% (40)	11.1% (5)
Total	88.4% (359)	11.6% (47)	86.5% (2693)	13.5% (421)

Yearly Income by Site - 2006

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Douglas	$3,300	11	$8,520	78
Central Phoenix	$9,000	5	$12,000	62
Maryvale	$13,800	6	$14,400	60
South Phoenix	$9,600	7	$12,000	33
East Valley	$6,684	9	$12,000	57
Nogales	$8,400	8	$10,200	87
Page	$4,800	5	$10,200	30
Casa de los Niños	$16,080	14	$11,720	76
CODAC	$5,892	11	$10,800	94
La Frontera	$12,960	14	$9,600	101
Sierra Vista	$12,000	18	$3,732	48
Tuba City	$15,600	3	$11,040	23
Verde Valley	$14,400	57	$12,000	55
Yuma	$28,200	2	$8,400	57
Pascua Yaqui	$8,400	24	$7,110	44
Lake Havasu City	$21,855	22	$14,400	78
Flagstaff	$12,000	28	$9,600	41
Sunnyslope	$12,000	9	$9,600	53
Prescott	$15,900	10	$12,000	31
Pinal County	$3,568	2	$9,600	44
Mesa	$20,000	15	$6,228	75
Southeast Phoenix	$15,600	11	$10,548	69
El Mirage	$27,000	6	$18,504	48
Blake Foundation	$10,800	10	$12,000	75
Marana	$14,480	4	$14,400	54
Safford	$10,800	8	$13,200	19
Stanfield	$5,838	6	$8,940	2
Apache Junction	$13,200	29	$13,100	38
Gila River	$13,200	7	No data	No data

Site	PRENATAL		POSTNATAL	
	Median Yearly Income	Number	Median Yearly Income	Number
Winslow	$9,600	8	$8,460	14
Kingman	$9,600	7	$14,400	35
Globe/Miami	$4,700	4	$12,000	9
Kyrene	$15,000	12	$14,400	40
Metro Phoenix	$11,904	7	$14,400	49
Tolleson	$7,800	10	$14,400	51
South Mountain	$10,800	11	$14,400	50
Glendale	$2,448	3	$14,400	45
Deer Valley	$14,560	7	$14,400	43
East/SE Tucson	$7,200	7	$19,200	32
SW Tucson	$7,740	8	$13,000	56
Bullhead City	$5,000	3	$12,000	18
Northwest Phoenix	$10,800	7	$15,600	24
Tempe	$13,800	12	$14,400	33
Gilbert	$10,800	9	$14,400	35
Scottsdale	$16,800	4	$15,000	20
West Phoenix	$21,600	5	$14,400	41
East Mesa	$11,400	18	$16,360	45
Kinlani-Flagstaff	$8,700	24	$8,320	43
Total	$12,000	527	$12,000	2215

Parent Survey Score by Site - 2006

Site	PRENATAL			POSTNATAL		
	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40
Douglas	41.54	69.2%	9	37.72	44.4%	36
Central Phoenix	53.89	88.9%	8	42.17	54.5%	54
Maryvale	47.31	84.6%	11	41.78	53.5%	48
South Phoenix	48.33	75.0%	9	42.76	58.6%	34
East Valley	40.00	50.0%	7	42.71	65.1%	54
Nogales	38.50	40.0%	4	34.64	33.0%	32
Page	37.50	50.0%	3	33.17	20.0%	6
Casa de los Niños	36.25	25.0%	4	37.57	46.7%	50
CODAC	45.00	75.0%	15	40.30	58.5%	69
La Frontera	53.13	81.3%	13	39.16	51.2%	64
Sierra Vista	42.05	45.5%	10	38.25	43.9%	25
Tuba City	40.00	54.5%	6	28.78	22.0%	9
Verde Valley	36.87	41.8%	28	34.15	27.1%	16
Yuma	36.67	50.0%	3	34.55	31.2%	24
Pascua Yaqui	31.03	20.7%	6	31.49	21.3%	10
Lake Havasu City	50.68	77.3%	17	38.11	42.7%	35
Flagstaff	36.03	35.7%	12	37.62	47.6%	20
Sunnyslope	39.09	45.5%	5	39.56	55.0%	44
Prescott	48.75	70.0%	14	39.24	49.1%	55
Pinal County	38.85	46.2%	6	34.03	31.8%	28
Mesa	47.73	77.3%	17	41.03	53.2%	67
Southeast Phoenix	35.71	35.7%	5	42.05	60.0%	60
El Mirage	42.14	64.3%	9	36.53	47.1%	40
Blake Foundation	39.64	57.1%	8	41.06	53.2%	50
Marana	35.00	42.9%	3	34.85	48.5%	32
Safford	17.27	0	0	15.42	0	0

Site	PRENATAL			POSTNATAL		
	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40	Mean Score	Percent of mothers whose score was greater than 40	Number of mothers whose score was greater than 40
Stanfield	38.50	50.0%	5	45.00	57.1%	4
Apache Junction	47.94	73.5%	25	51.60	80.9%	38
Gila River	41.54	53.8%	7	28.75	25.0%	1
Winslow	44.00	70.0%	7	25.88	29.4%	5
Kingman	37.50	50.0%	5	37.20	38.0%	19
Globe/Miami	21.11	33.3%	3	30.87	43.5%	10
Kyrene	41.00	65.0%	13	41.81	58.0%	40
Metro Phoenix	41.79	57.1%	8	40.47	51.4%	38
Tolleson	37.50	50.0%	7	37.80	41.3%	31
South Mountain	36.33	46.7%	7	41.67	57.1%	48
Glendale	45.00	75.0%	6	41.55	57.7%	41
Deer Valley	42.22	55.6%	5	39.66	53.4%	39
East/SE Tucson	37.50	62.5%	5	44.38	62.5%	25
SW Tucson	35.00	44.4%	4	37.32	40.6%	28
Bullhead City	41.67	55.6%	5	41.25	56.3%	18
Northwest Phoenix	37.86	35.7%	5	40.54	56.8%	21
Tempe	52.29	83.3%	20	43.09	67.3%	37
Gilbert	55.25	90.0%	18	43.66	64.2%	43
Scottsdale	48.13	75.0%	6	40.80	63.6%	28
West Phoenix	50.00	90.0%	9	42.12	62.1%	41
East Mesa	50.97	77.4%	24	43.11	56.1%	37
Kinlani-Flagstaff	41.85	63.0%	17	38.83	53.2%	25
Total	41.85	57.4%	443	39.06	49.6%	1579

Trimester of Enrollment into Prenatal Program
July 2005 to June 2006

Site	1st Trimester		2nd Trimester		3rd Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
Apache Junction	11	21%	25	47%	12	23%	5	9%	53
Blake Foundation	5	24%	4	19%	11	52%	1	5%	21
Bullhead City	0	0%	6	50%	4	33%	2	17%	12
Casa de los Niños	6	27%	6	27%	6	27%	4	18%	22
Cen Phx/Sunnyslope	0	0%	7	44%	7	44%	2	13%	16
CODAC	1	6%	4	25%	9	56%	2	13%	16
Deer Valley	2	9%	7	32%	10	45%	3	14%	22
Douglas/Bisbee	0	0%	3	23%	8	62%	2	15%	13
East Mesa	3	23%	5	38%	4	31%	1	8%	13
East Valley Phx	5	11%	17	37%	21	46%	3	7%	46
East/SE Tucson	1	6%	8	44%	8	44%	1	6%	18
El Mirage/Surprise	1	9%	3	27%	4	36%	3	27%	11
Flagstaff	1	7%	7	47%	7	47%	0	0%	15
Gila River	9	24%	10	27%	18	49%	0	0%	37
Gilbert	2	15%	4	31%	3	23%	4	31%	13
Glendale	0	0%	8	27%	19	63%	3	10%	30
Globe/Miami	1	8%	1	8%	10	83%	0	0%	12
Kingman	0	0%	4	40%	6	60%	0	0%	10
Kyrene	2	13%	4	27%	4	27%	5	33%	15
La Frontera	4	13%	8	25%	18	56%	2	6%	32
Lake Havasu City	0	0%	9	50%	7	39%	2	11%	18
Marana	9	36%	10	40%	6	24%	0	0%	25
Maryvale	2	18%	5	45%	3	27%	1	9%	11
Mesa	2	12%	5	29%	6	35%	4	24%	17
Metro Phoenix	5	20%	7	28%	13	52%	0	0%	25
Nogales	0	0%	10	45%	9	41%	3	14%	22
Northwest Phoenix	1	7%	3	21%	5	36%	5	36%	14
Page	0	0%	7	47%	5	33%	3	20%	15
Pascua Yaqui	5	38%	4	31%	4	31%	0	0%	13
Pinal County	7	20%	12	34%	16	46%	0	0%	35
Prescott	4	18%	7	32%	11	50%	0	0%	22
Safford	3	25%	2	17%	6	50%	1	8%	12
Scottsdale	1	8%	3	23%	8	62%	1	8%	13

Site	1st Trimester		2nd Trimester		3rd Trimester		Post-birth		Total
	#	%	#	%	#	%	#	%	#
Sierra Vista	2	8%	12	50%	8	33%	2	8%	24
South Mountain	3	17%	3	17%	9	50%	3	17%	18
South Phoenix	1	7%	4	29%	5	36%	4	29%	14
Southeast Phoenix	1	7%	6	40%	4	27%	4	27%	15
Stanfield	3	21%	6	43%	3	21%	2	14%	14
Sunnyslope	2	17%	4	33%	5	42%	1	8%	12
SW Tucson	1	9%	5	45%	4	36%	1	9%	11
Tempe	1	4%	7	27%	16	62%	2	8%	26
Tolleson	0	0%	9	53%	7	41%	1	6%	17
Tuba City	0	0%	5	38%	8	62%	0	0%	13
Verde Valley	7	9%	16	20%	54	67%	4	5%	81
West Phoenix	0	0%	6	40%	7	47%	2	13%	15
Williams (Kinlani)	5	12%	6	15%	30	73%	0	0%	41
Winslow	1	7%	3	21%	8	57%	2	14%	14
Yuma	0	0%	0	0%	5	71%	2	29%	7
Total	120	12%	317	32%	461	47%	93	9%	991

Prenatal Families that Exited before Baby's Birth By Site - July 2005 through June 2006

Site	Total Families	# Closed before birth	% Closed before birth
Apache Junction	13	0	0%
Blake Foundation	16	1	6%
Bullhead City	17	2	12%
Casa de los Niños	14	1	7%
Cen Phx/Sunnyslope	18	1	6%
CODAC	14	1	7%
Deer Valley	13	4	31%
Douglas/Bisbee	22	2	9%
East Mesa	22	1	5%
East Valley Phx	18	0	0%
East/SE Tucson	24	0	0%
El Mirage/Surprise	13	0	0%
Flagstaff	81	2	2%
Gila River	7	0	0%
Gilbert	35	0	0%
Glendale	25	3	12%
Globe/Miami	37	1	3%
Kingman	12	0	0%
Kyrene	22	0	0%
La Frontera	16	0	0%
Lake Havasu City	25	0	0%
Marana	15	0	0%
Maryvale	15	0	0%
Mesa	21	3	14%
Metro Phoenix	11	2	18%
Nogales	12	1	8%
Northwest Phoenix	14	3	21%
Page	53	6	11%
Pascua Yaqui	13	0	0%
Pinal County	14	0	0%
Prescott	15	0	0%

Site	Total Families	# Closed before birth	% Closed before birth
Safford	10	0	0%
Scottsdale	32	2	6%
Sierra Vista	22	0	0%
South Mountain	17	0	0%
South Phoenix	18	1	6%
Southeast Phoenix	12	0	0%
Stanfield	13	1	8%
Sunnyslope	11	2	18%
SW Tucson	11	1	9%
Tempe	12	0	0%
Tolleson	15	0	0%
Tuba City	26	1	4%
Verde Valley	30	2	7%
West Phoenix	13	0	0%
Williams (Kinlani)	15	0	0%
Winslow	46	2	4%
Yuma	41	1	2%
Total	991	47	5%

Appendix B: Parent Survey*

Problem Areas and Interpretation (Mother & Father)

Areas (Scales)	Range	Interpretation/ Administration
1. Parent Childhood Experiences (e.g., Childhood history of physical abuse and deprivation)	0, 5, or 10	The *Parent Survey* comprises a 10-item rating scale. A score of 0 represents normal, 5 represents a mild degree of the problem, and a 10 represents severe for both the Mother and Father Parent Survey Checklist items. The *Parent Survey* is an assessment tool and is administered to the mother and father through an interview by a Family Assessment Worker from the Healthy Families Arizona Program. The interview takes place shortly after birth, or as near to that time as possible.
2. Lifestyle, Behaviors and Mental Health (e.g., substance abuse, mental illness, or criminal history)	0, 5, or 10	
3. Parenting Experiences (e.g., Previous or current CPS involvement)	0, 5, or 10	
4. Coping Skills and Support Systems (e.g., Self-esteem, available lifelines, possible depression)	0, 5, or 10	
5. Stresses (e.g., Stresses, concerns, domestic violence)	0, 5, or 10	
6. Anger Management Skills (e.g., Potential for violence)	0, 5, or 10	
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 C. Mean scores and standard deviations[14] on subscales by category of worker

Subscale (range)	Family Support Specialists Mean Score (SD)	Family Assessment Workers Mean Score (SD)	Supervisors Mean Score (SD)
Realistic expectations at entry (5–20)	16.2 (2.8)	14.8 (3.8)	15.4 (3.7)
Personal/professional fit (5– 20)	17.5 (2.1)	17.1 (1.5)	17.2 (2.3)
Professional efficacy (5–30)	26.4 (2.4)	25.4 (3.9)	26.2 (2.5)
Perception of workload (5– 15)	13.0 (3.5)	13.3 (2.4)	13.4 (3.0)
Quality supervision (5 –75)	63.2 (10.9)	63.1 (7.6)	63.1 (9.4)
Opportunity for meaningful input (5 –30)	23.1 (3.5)	21.3 (3.2)	23.6 (3.4)
Leadership encouraged (5– 25)	18.5 (3.6)	17.3 (3.2)	19.6 (3.6)
Location attachment (5–15)	11.1 (3.2)	11.2 (2.5)	11.8 (2.5)
Perceived employing agency performance (5–25)	21.3 (3.1)	19.4 (2.5)	20.7 (3.5)
Non-salary reward (5-30)	25.8 (3.3)	25.0 (3.1)	25.8 (3.5)
Salary (5–20)	12.3 (3.4)	12.9 (2.9)	13.2 (3.6)
Opportunity for advancement (5–25)	19.9 (3.0)	19.0 (2.9)	19.9 (3.6)
Perceived community sanction (5– 20)	17.4 (2.6)	16.4 (3.3)	16.8 (2.5)

[14] The mean, or arithmetic average, is a measure of central tendency and is calculated from the sum of all the scores divided by the number of scores. The median is also a measure of central tendency and it is the "middlemost" score or the value where half the scores fall above and half the scores fall below. The standard deviation is a measure of variability or dispersion and is the square root of the variance. Variance is computed as an average of the squared deviations of scores about the mean.

Appendix D: Healthy Families Parenting Inventory

Healthy Families Parenting Inventory Cronbach's Alpha Scores

Subscale	**Alpha* 2month**	**Alpha* 6month**	**Alpha* 12month**
Social support	r=.76	r=.78	r=.80
Problem solving	r=.76	r=.80	r=.81
Depression	r=.82	r=.84	r=.85
Personal care	r=.78	r=.80	r=.84
Mobilizing resources	r=.80	r=.83	r=.82
Accepting the parent role	r=.56	r=.61	r=.65
Parent Child behaviors	r=.76	r=.78	r=.81
Home environment	r=.71	r=.76	r=.77
Parent competence	r=.66	r=.71	r=.74
Parenting efficacy	r=.84	r=.86	r=.88

*Alpha scores represent the correlation of items on a scale, and indicate how well the items in a subscale relate to each other.

Appendix E: Selected Risk Factors at Intake
All Families –2006

Selected Risk Factors for Mothers at Intake*--2006

Risk Factors of Mothers	All Families (prenatal and postnatal combined)
Teen Births (19 years or less)	26.8%
Births to Single Parents	67.1%
Less Than High School Education	64.7%
Not Employed	84.0%
No Health Insurance	3.4%
Receives AHCCCS	87.4%
Late or No Prenatal Care	35.1%

Appendix F. Healthy Families Prenatal Logic Model

Long Term Outcomes	Program Resources
① Reduced child abuse and neglect ② Increased child wellness and development ③ Strengthened family relations ④ Enhanced family unity ⑤ Reduced abuse of drugs and alcohol	Family Support Specialists; Family Assessment Workers; Clinical consultants; Quality Assurance/Training/Evaluation; Funding; Community based services, e.g., prenatal support & education programs, hospital programs, nutrition services, translation & transportation services, mental health, domestic violence, substance abuse services

Prenatal Program 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	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
Program Activities and Strategies								
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 behaviors	**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** and provide materials on nutrition during pregnancy, buying and choosing healthy foods, and requirements for healthy fetal development **Provide referrals** to WIC, other resources **Encourage** healthy celebrations	**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** pre-birth 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
Outcome Evaluation Measures								
H.F. Parenting Inventory-Prenatal (HFPIP); FSS-23	HFPIP; FSS-23	HFPIP; FSS-23; CRAFFT	HFPIP; FSS-23	HFPIP; FSS-23	HFPIP; FSS-23	HFPIP; FSS-23; father involvement scale	HFPIP; FSS-23; Safety checklist	HFPIP; FSS-23; FSS20P

Appendix G. Healthy Families Postnatal Logic Model

Long Term Outcomes	Program Resources
① Reduced child abuse and neglect ② Increased child wellness and development ③ Strengthened family relations ④ Enhanced family unity ⑤ Reduced 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

Postnatal Program Objectives								
Increase the family's support network	Improve mother's mental health	Increase parents' health behaviors	Increase the family members' problem solving skills	Improve family stability	Increase parental competence	Increase positive parent-child interaction	Improve child health and Optimize child development	Prevent child abuse and neglect
Program Activities 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**/coach 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 and needs; help family access housing, education, job, and budget management services. **Coach** parent to set and evaluate goals; teach basic living skills **Promote** use of community resources for self sufficiency **Explore** family planning decisions	**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
Outcome Evaluation Measures								
Healthy Families Parenting Inventory (HFPI); FSS-23	HFPI; FSS-23	HFPI; FSS-23; CRAFFT	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23	HFPI; FSS-23; father involvement scale	HFPI; FSS-23; Safety checklist; ASQ	HFPI; FSS-23; FSS20