Healthy Families Arizona
Annual Evaluation Report

July 2018 – September 2019

Healthy Families Arizona™

LeCroy & Milligan ASSOCIATES, INC.

Healthy Families Arizona, Annual Evaluation Report
July 2018 – September 2019

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About LeCroy & Milligan Associates:

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Executive Summary

The Healthy Families Arizona program is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Families that choose to participate receive home visits and referrals from trained staff. The Healthy Families Arizona program serves families with multiple stressors and risk factors that can increase the likelihood that their children may suffer from abuse, neglect, or other poor outcomes. By providing services to under-resourced, stressed, and overburdened families, the Healthy Families Arizona program fits into a continuum of services provided to Arizona families.

The Healthy Families Arizona Program

Healthy Families Arizona is in its 28th year, and is modeled after and accredited with, the Healthy Families America initiative under the auspices of Prevent Child Abuse America. With combined funding from the Arizona Department of Child Safety (DCS), First Things First (FTF), and the Department of Health Services (DHS) Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program, Healthy Families Arizona provides services to families in 13 counties through 11 sites with 3 family assessment teams and 38 home visitor teams.

Healthy Families Arizona served a total of 4,420 families from July 1, 2018 through September 30, 2019. A total of 2,068 were served by sites funded through the DCS; 1,324 through FTF; and 950 through DHS/MIECHV. An additional 78 families have outside funding in the Maricopa County area. Families come from 246 different zip codes in 13 counties in Arizona.

A New Statewide Home Visiting Data Integration System

The Healthy Families Arizona program now collects program and services information through the new online Arizona Home Visiting Data Integration (Efforts to Outcomes – ETO[1]) system. This integrated case management information system has been in development since 2017 and involves home visiting programs funded by three separate agencies: DCS, FTF, and DHS. The data system is being implemented specific to the needs of all Arizona's funded home visiting programs on the ETO software platform.

[1] : https://www.socialsolutions.com/software/eto/

The design, pilot testing and initial implementation of this online data collection system has resulted in limitations to data availability for this report for 2019.

The promise of an integrated data system is that policy-makers, state agency program staff and local home visiting program managers will be able to track client data, program enrollments, cases, service planning and delivery across different home visiting programs in one place. This will eventually enable more efficient means to share data and integration between data systems. The expectation is that by April of 2020 full implementation of the data system for Healthy Families programming will be completed.

Who Does Healthy Families Arizona Serve?

Families and children in the state of Arizona continue to have significant needs as they seek to thrive in diverse communities across the state. According to the 2019 KIDS COUNT DATA BOOK[2], Arizona is ranked 46th out of 50 states in overall child well-being. Of particular note for the implementation of Healthy Families are the following factors:

- Tremendous Growth in Child Population: Healthy Families Arizona is serving a growing child population with more need. According to the 2019 KIDS COUNT DATA BOOK, Arizona is rated as the state having the most growth of the child population that has outpaced the 1990-2017 national average while Arizona has actually dropped in its state ranking of overall child well-being. In 1990 Arizona's ranking for overall child well-being was 39th and in 2019 it is ranked 46th out of 50 states.

- Growing Diversity of Arizona Children and Families: Healthy Families Arizona must engage a more diverse population of families and children each year. The majority of children and youth in Arizona (44%) who are age 19 or younger identify as being of Latino/Hispanic ethnicity. In addition, poverty affects children of color disproportionately in Arizona, with 45% of Native American children, 35% of Hispanic/Latino children, and 31% of African American children living in poverty in 2016, compared to 13% of White children. Recent research and Arizona state health agency reporting indicates that in Arizona, African American children are 2.5 times more likely to be in poverty than their White peers. In Arizona, African American children have higher rates of reported child maltreatment than other children. In Arizona, African American children were disproportionately more likely to die from prematurity, unintentional injuries, sudden unexplained infant death, and maltreatment related deaths.

[2] See: http://azchildren.org/wp-content/uploads/2019/02/KIDS-Count-2019-final-web.pdf

- Needs Vary Considerably by Geographic Area: Healthy Families Arizona must serve very different regions and maintain program fidelity along with equity in the quality of service provision. Rural areas of the state have considerably more need and fewer resources for families and children. In addition, there are some counties that represent more challenges to service provision than others. For example, and as mentioned earlier, Phoenix Children's Hospital, as part of the Arizona ACEs Consortium[3], reports that Arizona has "hot spots," most notably Yuma and Santa Cruz Counties, where a high proportion of children in those counties had experienced five or more ACEs. Adverse Childhood Experiences (ACEs) include a range of experiences that characterize trauma and toxic stress, which can impact early and lifelong health and well-being of children, especially those who experience the compounding effects of multiple ACEs.

Healthy Families Arizona program families have a significant number of maternal risk factors at entry into the program compared to the overall state rates. The mothers enrolled in Healthy Families Arizona are more likely to be teen parents, single parents, unemployed, undereducated, and with lower incomes.

Risk Factors of Mothers	Healthy Families Arizona	Arizona State
Teen Births (19 years or less)	11.3%	7.0%*
Births to Single Parents	69.4%	48.2%*
Less Than High School Education	33.7%	17.8%*
Not Employed	58.8%	33.9%**
Median Yearly Income	$22,800	$56,581 **

Source: *2017 data from the Arizona Department of Health Services Vital Statistics records. **U.S. Census Bureau, American Community Survey, 2017.

Outcomes for Families and Children Participating in Healthy Families Arizona

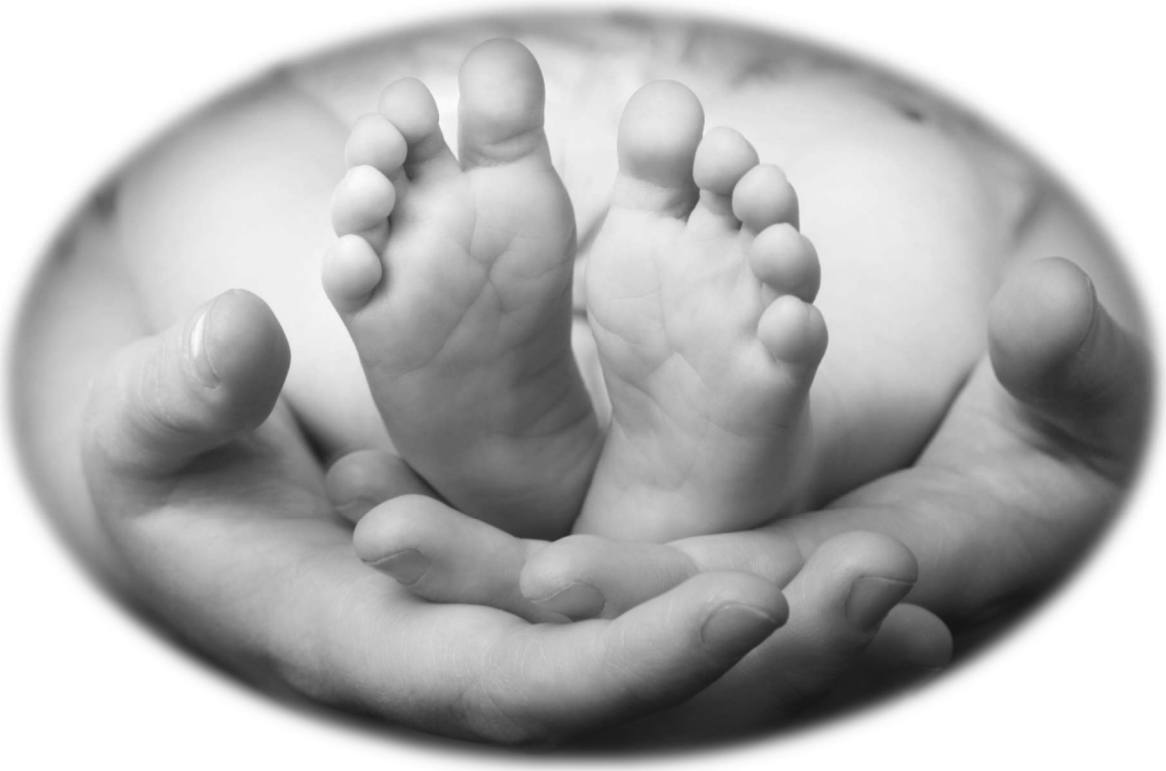
The Healthy Families Parenting Inventory (HFPI) revealed statistically significant improvement on all subscales except social support at 12 months. This indicates that Healthy Families Arizona participants are continuing to see reductions in their risk factors related to child abuse and neglect. **Parents reported significant changes over time in:**

[3] See: https://azaces.org/

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

Child Abuse and Neglect

Healthy Families Arizona teams provided voluntary home visitation services to a total of 1,105 families that were involved with the Department of Child Safety (DCS).Records of child abuse and neglect incidents (substantiated) were examined for program participants who had received services for at least six months. A total of 108 Healthy Families Arizona families had a substantiated case of child abuse and/or neglect out of 2,960 families that had participated in the program for at least 6 months.



Introduction

Healthy Families Arizona was established in 1991 by the Arizona Department of Economic Security (now housed at the Arizona Department of Child Safety) as a home visitation service for at-risk families and is now in its 28th year. The Healthy Families Arizona program is accredited by Prevent Child Abuse America and is modeled after the Healthy Families America initiative. Healthy Families America began under the auspices of Prevent Child Abuse America (formerly known as the National Committee to Prevent Child Abuse) in partnership with the Ronald McDonald House Charities. Healthy Families America was designed to promote positive parenting, enhance child health and development, and prevent child abuse and neglect. Healthy Families America has approximately 600 affiliated program sites in 38 States, the District of Columbia, 5 U.S. Territories, Canada, and Israel. Healthy Families America is approved as an "evidence-based early childhood home visiting service delivery model" by the US Department of Health and Human Services. The program model of Healthy Families is designed to help expectant and new parents get their children off to a healthy start. Families are screened according to specific criteria and participate *voluntarily* in the program. Trained staff provide home visits and referrals to families that choose to participate. By providing services to under-resourced, stressed, and overburdened families, the Healthy Families Arizona program fits into a continuum of services provided to Arizona families.

Healthy Families Arizona Statewide System

Healthy Families Arizona is an affiliate of the Healthy Families America (HFA) State/Multi-Site system. Central Administration for all accredited Healthy Families Arizona sites is housed within the Office of Accountability under the Arizona Department of Child Safety. There are five core functions of Central Administration which are designed to support the statewide system of single sites, these include: quality assurance/technical assistance; evaluation; training; system-wide policy development; and administration. Each of these functions covers a set of activities and tasks that guide operations at the Central Administration level as well as at the program level.

The funding structure for the Healthy Families Arizona Program is supported by three state agencies: the Arizona Department of Child Safety (DCS), First Things First (FTF), and the Arizona Department of Health Services (DHS). The DCS Central Administration supports collaboration with the three state agencies in a fully integrated system to enhance the quality of Healthy Families Services. In State Fiscal Year 2019, funding for the statewide system included $8,923,508 from DCS, $6,054,179 from FTF, and $3,623,027 from

DHS. The combined funding of $18,600,714 from DCS, FTF, and DHS allows the Healthy Families Arizona sites and teams to provide services to families living in 13 counties and 246 zip code areas around Arizona. At the end of the reporting period September 30, 2019, there were 11 sites with 3 family assessment teams and 38 home visitor teams (14 DCS funded, 7 FTF funded, 11 DHS funded, and 8 receiving funding from more than one source) for a total of 43 teams. See Exhibit 1 for a summary of funding amounts and Exhibit 2 for a list of teams funded in Fiscal Year 2019.

Exhibit 1. Healthy Families Arizona Funding

Year	Annual Funding Amount
2008	$18 Million – Department of Economic Security (DES)
2009	$6.1 Million – DES (Year of funding cutback)
2010	$12.3 Million total - $6 Million DES, $6.3 Million FTF
2011	$12.5 Million total - $6.5 Million DES, $6 Million FTF
2012	$12.4 Million total - $6.3 Million DES, $5.9 Million FTF, $117,212 MIECHV
2013	$14.2 Million total - $6.6 Million DES, $5.6 Million FTF, $2 Million MIECHV
2014	$16.3 Million total - $6.6 Million DCS, $6 Million FTF, $3.7 Million MIECHV
2015	$17.9 Million total - $7.2 Million DCS, $5.9 Million FTF, $4.8 Million MIECHV
2016	$15.9 Million total - $6 Million DCS, $4.5 Million FTF, $5.4 Million MIECHV
2017	$18.1 Million total - $9.8 Million DCS, $4.2 Million FTF, $4 Million MIECHV
2018	$16.0 Million total - $8.2 Million DCS, $4.2 Million FTF, $3.5 Million MIECHV
2019	$18.6 Million total - $8.9 Million DCS, $6.1 Million FTF, $3.6 Million MIECHV

Exhibit 2. Healthy Families Arizona Program Sites in Fiscal Year 2019

Site	Number of Teams
Apache County / Navajo County	1
Cochise County / Santa Cruz County	2
Coconino County	1
Graham County / Greenlee County	2
Maricopa County	18
Mohave County	3
Pima County	4
Pinal County	3
Verde Valley (in Yavapai County)	1
Prescott Valley (in Yavapai County)	1
Yuma County	2
Statewide	**38**

Report Overview

The purpose of the Healthy Families Arizona annual report is to provide information on families' outcomes, program performance measures, process and implementation information, and evaluation information that can be used to guide program improvement. This year's report is different than in previous years due to: (1) changes in the way that data was collected, which will be described in further details in the Program Updates section; and (2) a change from State Fiscal Year to Federal Fiscal Year reporting. This report covers a combination of the start of the State Fiscal Year 2019 on July 1, 2018 through the end of the Federal Fiscal Year 2019 on September 30, 2019. Annual reports after this year will follow the Federal Fiscal Year reporting period (10/1/2019 to 9/30/2020) to align with the contracts held by the local agencies providing services to the Healthy Families Arizona program.

The evaluation of Healthy Families Arizona includes both process and outcome evaluation. The process evaluation includes an update of statewide implementation, describes the characteristics of families participating in the program, and provides general satisfaction of families participating in the program. The outcome evaluation normally examines program outcomes and looks at the program's impact across a number of measures, with comparisons to previous years. However, the implementation of the new online data system has created some limitations to analyzing outcome level data for this report and some year to year comparisons are not possible. These data limitations are scheduled to be resolved in in Spring and Summer 2020 to allow for complete year to year comparisons in next years evaluation report.

The next sections present information on Arizona's children and families, and recent research on home visiting. This section helps to provide some context for the Healthy Families Arizona program.

Arizona's Children & Families

Exploring the Need for Healthy Families Arizona

The Arizona Department of Child Safety has as its mission to successfully engage children and families to ensure safety, strengthen families, and achieve permanency. The Healthy Families Arizona program is a prevention program of the Department of Child Safety. As mentioned earlier, the aims of the Healthy Families program model align with the mission of the Department of Child Safety especially in terms of ensuring the safety of children, preventing child maltreatment, and strengthening families. This section of the report will provide some background information on the needs of children and families in Arizona. In addition, information will be provided summarizing recent home visiting research and current policy initiatives.

Child Demographics in Arizona

Exhibit 3 shows population statistics of children and youth by county and statewide, from the Arizona KIDS COUNT Data Book (CAA, 2019). Overall, 24% of Arizonans are under age 18 and 6% are under age 5. In Arizona, 5% of children and youth age 19 or under are American Indian. Counties that have a high proportion of American Indian children and youth include: Apache County (77%), Navajo County (52%), Coconino County (32%), Gila County (28%), La Paz County (19%), and Graham County (15%). Similarly, 5% of children and youth age 19 or under in Arizona are African American. Counties that have a high proportion of African American children and youth include: Maricopa County (6%), Pinal County (5%), Pima County (4%), and Cochise County (4%). The majority of children and youth in Arizona (44%) who are age 19 or younger identify as being of Latino/Hispanic ethnicity.

Exhibit 3. Population Statistics of Children and Youth by County and Race/Ethnicity, 2016

County	% of Population under 18	% of Population under 5	% of Population age 19 and under that is American Indian	% of Population age 19 and under that is that is African American	% of Population age 19 and under that is Latino/ Hispanic
Apache	28%	7%	77%	1%	8%
Cochise	22%	6%	1%	4%	49%
Coconino	21%	6%	32%	1%	19%
Gila	20%	6%	28%	1%	27%
Graham	28%	7%	15%	1%	35%
Greenlee	28%	8%	2%	2%	50%
La Paz	17%	5%	19%	2%	49%
Maricopa	25%	7%	2%	6%	44%
Mohave	18%	4%	3%	1%	27%
Navajo	27%	7%	52%	1%	14%
Pima	21%	6%	3%	4%	52%
Pinal	24%	6%	5%	5%	41%
Santa Cruz	28%	7%	<1%	<1%	93%
Yavapai	17%	4%	2%	1%	28%
Yuma	25%	7%	1%	1%	79%
Arizona	**24%**	**6%**	**5%**	**5%**	**44%**

Source: Children's Action Alliance, 2019.

Child Well-Being Indicators

Exhibit 4 shows data from the National KIDS COUNT Data Center4, a project of the Annie E. Casey Foundation (2018), for the U.S. and Arizona. This data covers domains of economic well-being, health, and family and community, and includes child well-being indicators that are related to risk factors for child maltreatment. While many of Arizona's child well-being indicators have improved over time (observed as a decrease in percentage or rate from 2010 to 2017), Arizona's latest indicators generally fair worse in comparison to

[4] See: https://www.aecf.org/m/resourcedoc/aecf-2018kidscountdatabook-2018.pdf

U.S. data – for example, the percentage of children whose parents lack secure employment (28% U.S. vs. 31% AZ), the percentage of children in single parent families (35% U.S. vs. 38% AZ), and the percentage of children living in high poverty areas (13% U.S. vs. 23% AZ).

Exhibit 4. Child Well-Being Indicators for the U.S. and Arizona, 2010 and 2016

Domains and Indicators	United States		Arizona	
	2010	2016	2010	2016
Economic Well-Being				
Children whose parents lack secure employment (no regular, full-time employment)	33%	28%	35%	31%
Children living in households with a high housing cost burden (>30% of monthly income spent on housing)	41%	32%	43%	32%
Teens ages 16 to 19 years who are not enrolled in school and not employed	9%	7%	12%	9%
Health				
Low-birthweight babies	8.1%	8.2%	7.1%	7.3%
Children without health insurance	8%	4%	13%	7%
Child and teen deaths per 100,000	26	26	28	28
Teens who abuse alcohol or drugs	7%	5%	8*	6%
Family and Community				
Teen births per 1,000 births	34	20	42	24
Children in single-parent families	34%	35%	37%	38%
Children living in high-poverty areas	13%	13%	22%	23%
Children in families where the household head lacks a high school diploma	15%	14%	19%	17%

Source: Annie E. Casey Foundation, 2018.

Poverty and Economic Indicators

As poverty is a risk factor for child maltreatment, Exhibit 5. shows child poverty and economic indicators by county and statewide. Overall, 25% of children under 18 in Arizona are living below the federal poverty level (FPL) and 50% are living at or below 200% of the FPL. Counties with a high proportion of children living below the FPL are rural counties that have a high proportion of children and youth who are Native American: Apache County (45%), Navajo County (39%), La Paz County (38%), and Gila County (36%). These

counties also have a lower median family income, compared to other counties and statewide.

Exhibit 5. Economic Indicators by County and Statewide, 2016

County	% of Children Living Below Poverty Line	% of Children Living Below 200% of the Poverty Line	Median Income for Families	% of Children Participating in SNAP	Rate of Children Participating in TANF per 1,000 Children
Apache	45%	73%	$32,451	70%	5.0
Cochise	27%	53%	$50,777	46%	26.7
Coconino	26%	49%	$60,577	44%	12.2
Gila	36%	60%	$42,972	63%	18.2
Graham	29%	54%	$52,938	39%	13.8
Greenlee	19%	55%	$52,417	23%	14.8
La Paz	38%	76%	$35,250	61%	25.2
Maricopa	24%	47%	$60,373	37%	21.4
Mohave	28%	59%	$42,324	56%	29.7
Navajo	39%	68%	$37,008	62%	13.5
Pima	27%	52%	$50,965	43%	29.1
Pinal	24%	53%	$54,065	39%	25.4
Santa Cruz	29%	63%	$42,000	59%	19.0
Yavapai	21%	48%	$52,319	37%	23.7
Yuma	30%	61%	$40,757	53%	20.6
Arizona	**25%**	**50%**	**$55,776**	**41%**	**23.0**

Source: Children's Action Alliance, 2019

The exhibit above also shows data by county and statewide of children whose families are participating in various income eligibility benefits programs in Arizona. The Supplemental Nutrition Assistance Program (SNAP) is a federally funded program that is designed to reduce food insecurity by providing monetary assistance to families who meet income qualification. Overall, 41% of Arizona's children are in families that participate in SNAP. Counties with a high percentage of SNAP participation include: Apache County (70%), Gila County (63%), Navajo County (62%), and La Paz County (61%).

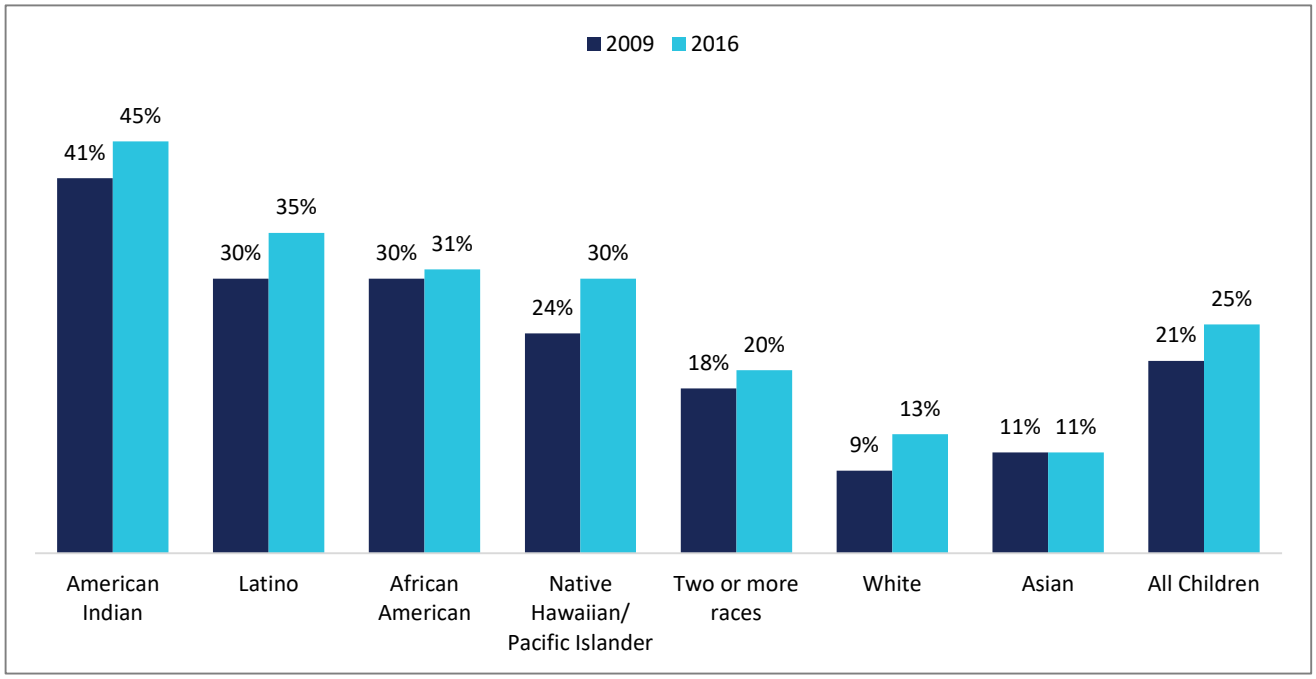
The Temporary Assistance for Needy Families (TANF) is a federally funded cash assistance program that provides monthly payment through a debit card to qualified parents with minor children earning very low income (benefit levels depend on family size and income). In Arizona, 23 out of 1,000 children are in families that receive TANF (see Exhibit 13). Counties with high rates of children participating in TANF include: Mohave County (29.7

per 1,000 children), Pima County (29.1 per 1,000 children), and Cochise County (26.7 per 1,000 children).

Poverty Rates by Race and Ethnicity

Exhibit 6. shows the percentage of children living below the FPL by race and ethnicity. Poverty affects children of color disproportionately in Arizona, with 45% of Native American children, 35% of Hispanic/Latino children, and 31% of African American children living in poverty in 2016, compared to 13% of White children. In Arizona, African American children are 2.5 times more likely to be in poverty than their White peers (Murphey, Belford, Balding, & Beckwith, 2018). Additionally, Native American families in Arizona experience poverty at a rate of 18%-58% on reservations (Inter Tribal Council of Arizona [ITCA], 2013)).

Exhibit 6. Child Race/Ethnicity by Poverty Status in Arizona, 2009 and 2016



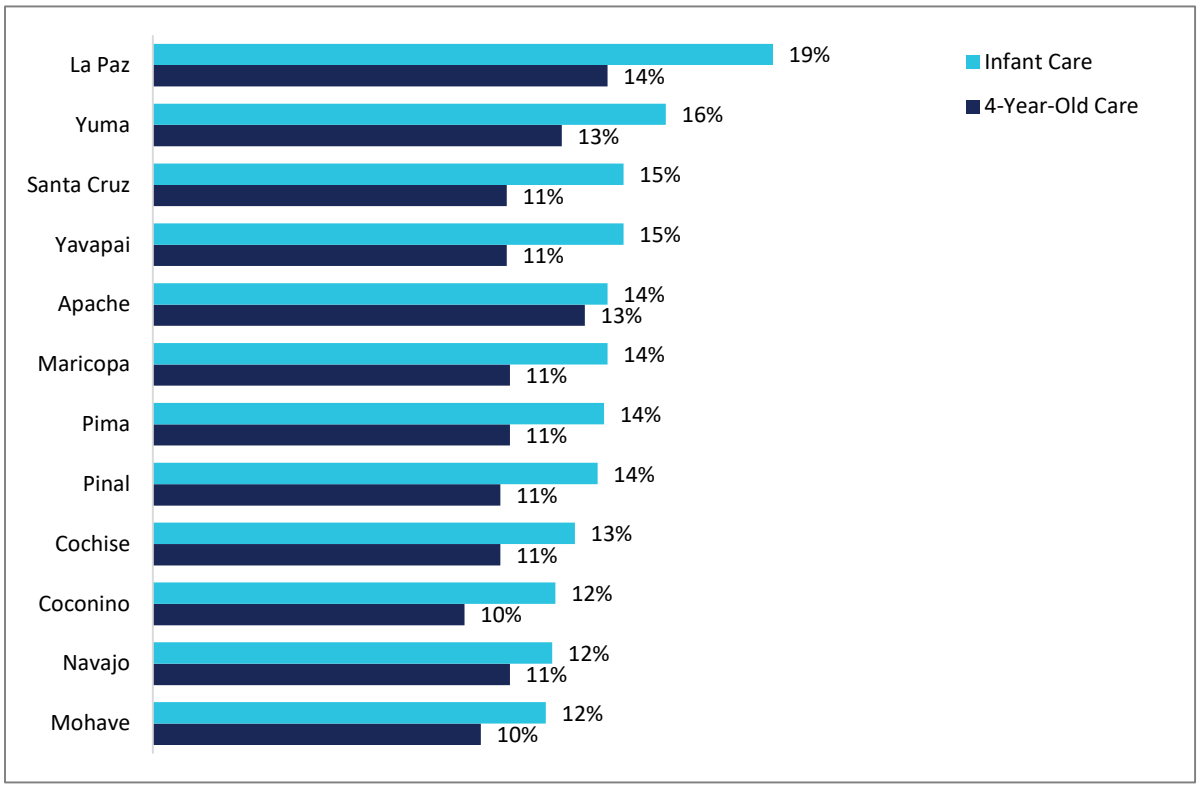
Source: Children's Action Alliance, 2019

Child Care Affordability

Lack of access to affordable and quality childcare is recognized as a risk factor for child maltreatment throughout the scientific literature. Exhibit 7. shows the affordability of center-based childcare for infants and four-year-old children by county in 2018 (Child Care Aware of America [CCAoA], 2018). (Note: data was not available for Gila, Graham, and Greenlee Counties). Affordability is determined by dividing the average annual cost of childcare for the county by the county's median income. The higher the percentage, the more money that families are paying for childcare as a percentage of their annual income.

La Paz County has the least affordable center-based childcare for both infants and four-year-olds, as families may be paying up to 19% of median household income to cover the cost of an infant and 14% to cover the cost of a four-year old. Yuma, Santa Cruz, Yavapai, Apache, Maricopa, Pima, and Pinal Counties also have high rates of center-based childcare, ranging from 14% to 16% of median income for infants and 11% to 13% for four-year-old children.

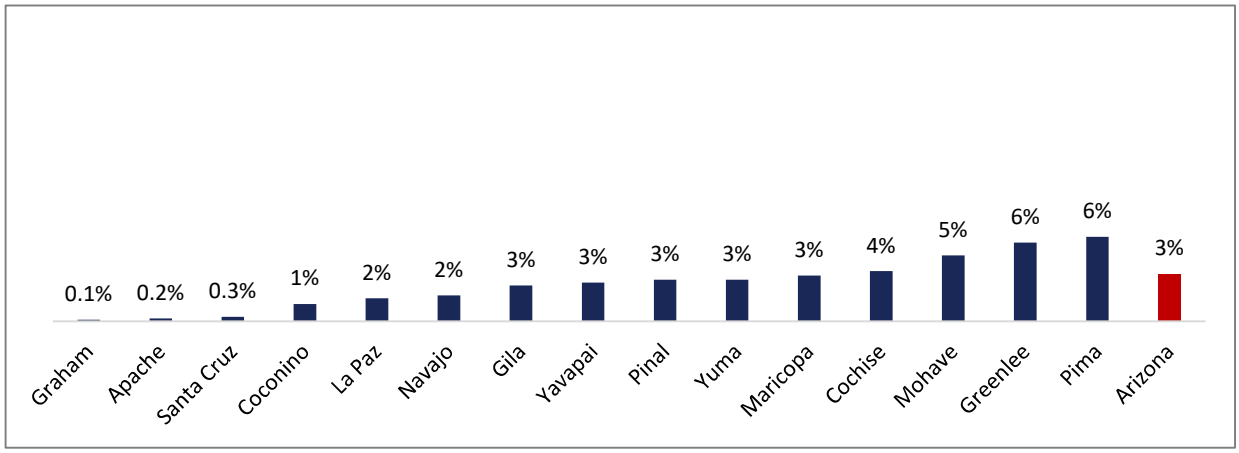
Exhibit 7. Center-Based Child Care Affordability* by Child Age, 2017



Source: Child Care Aware of America, 2018, using data provided by Child Care Resource & Referral, a statewide program of Child & Family Resources Inc. of Arizona. Note: Data was not available for Gila, Graham, and Greenlee Counties.
*Affordability is calculated as the average annual cost of childcare for the county as a percentage of the county median income.

The Arizona DES Child Care Assistance program helps eligible families to pay for the cost of childcare. Exhibit 8. shows that rates of assistance receipt are low considering the high cost of childcare by county and that a lack of affordable and quality childcare is recognized as a risk factor for child maltreatment.

Exhibit 8. Percentage of Children Participating in Child Care Assistance in Arizona, 2016



Source: Children's Action Alliance, 2019

Family Stress Indicators

Exhibit 9. shows various family characteristics by county and statewide in 2017 that are indicators of family stressors related to child maltreatment.

Exhibit 9. Family Characteristics by County and Statewide, 2017

County	% of Children Living in Two Parent Households	% of Children Raised by Grandparents	% of Children with All Parents Working	% of Children in Limited English-Speaking Households
Apache	44%	12%	52%	2%
Cochise	61%	9%	58%	4%
Coconino	60%	7%	68%	1%
Gila	52%	12%	70%	1%
Graham	63%	7%	57%	<1%
Greenlee	61%	4%	55%	<1%
La Paz	51%	7%	62%	5%
Maricopa	64%	4%	64%	4%
Mohave	56%	7%	65%	1%
Navajo	51%	11%	58%	2%
Pima	60%	5%	68%	3%
Pinal	64%	5%	62%	2%
Santa Cruz	55%	9%	65%	7%
Yavapai	67%	7%	64%	2%
Yuma	65%	5%	63%	10%
Arizona	**52%**	**5%**	**64%**	**4%**

Source: Annie E. Casey Foundation, 2018.

Child Maltreatment Disparities by Race and Ethnicity

The National Child Abuse and Neglect Data System (NCANDS) shows that African American children (non-Hispanic) have higher rates of reported child maltreatment than other children in both Arizona and the United States. In 2017, the maltreatment rate in Arizona for African American/Black, non-Hispanic children was 11.0 per 1,000 children, which is the highest rate of maltreatment compared to other children. This figure reflects numerous factors including poverty, racism, historical trauma, lack of culturally appropriate services, and institutional biases (Child Trends, 2019; National Academies of Sciences, Engineering, and Medicine [NASEM], 2017). This rate is disproportionately high considering that only 5% of children in Arizona are African American/Black. Additionally, the Arizona Department of Health Services (DHS) Child Fatality Review (CFR) teams reported that in 2017, African American children were disproportionately more likely to die from prematurity, unintentional injuries, sudden unexplained infant death, and maltreatment related deaths (DHS, 2018).

Exhibit 10. Substantiated Child Maltreatment Rates by Race/Ethnicity, U.S. and AZ, 2017

Race and Hispanic Origin	Child Maltreatment Rates per 1,000 children	
	United States	Arizona
African American/Black, non-Hispanic	13.9	11.0
Multiple Race	11.3	6.5
White, non-Hispanic	8.1	5.4
Hispanic	8.0	5.2
American Indian/Alaska Native, non-Hispanic	14.3	4.9
Pacific Islander, non-Hispanic	8.7	4.4
Asian, non-Hispanic	1.6	.6

Source: Department of Health and Human Services, 2017

Arizona recognizes 22 sovereign nations, with as many as 5%–6% of Arizona's population being a descendent of American Indian and Alaskan Native ancestry. American Indian and Alaskan Natives in Arizona face disparities in socio-economic and health outcomes compared to other racial and ethnic groups in the state (DHS, 2019a; ITCA, 2013; NASEM, 2017; Solomon, Cordova, & Garcia, 2017). These disparities can be attributed to numerous factors including lower educational achievement, increased poverty, culturally incompetent service providers and educators, language barriers, and the unavailability of services. Inequities are also compounded by issues such as historical trauma, substance abuse, and social isolation. DHS (2018) CFR teams report that in 2017, Native American children were disproportionately more likely to die from unintentional injuries, child maltreatment, and suicides (DHS, 2018).

Maternal and Child Health Indicators

Exhibit 11. shows data on maternal and child health indicators by county and statewide in 2017 that are considered risk factors for child maltreatment (DHS, 2019b).

Exhibit 11. Maternal and Child Health Indicators by County and Statewide, 2017

County	Rate of Teen Births per 1,000 Females Ages 10-19 Years	Percent of Low Birth Weight Births	Percent of Preterm Births	Percent of Pregnant Women Receiving Inadequate Prenatal Care	Births to Mothers with Less than High School Education
Apache	15.2	7.7%	9.9%	10.8%	17.4%
Cochise	12.9	7.9%	8.6%	15.5%	15.4%
Coconino	10.4	9.0%	11.0%	8.0%	13.5%
Gila	18.9	10.9%	10.9%	11.8%	21.8%
Graham	15.2	7.7%	12.5%	15.3%	17.5%
Greenlee	14.1	10.3%	11.5%	N/A	16.7%
La Paz	15.8	3.6%	7.7%	9.3%	26.8%
Maricopa	10.5	7.5%	9.4%	5.6%	16.7%
Mohave	13.2	7.3%	8.5%	7.0%	21.3%
Navajo	18.4	9.7%	10.4%	9.6%	21.0%
Pima	10.4	7.2%	8.4%	13.3%	16.1%
Pinal	11.2	7.1%	9.6%	4.7%	16.8%
Santa Cruz	12.3	6.5%	8.1%	30.3%	24.3%
Yavapai	11.9	7.5%	8.5%	4.1%	16.0%
Yuma	13.7	5.5%	8.3%	12.9%	23.3%
Arizona	**11.1**	**7.5%**	**9.2%**	**7.5%**	**17.1%**

Source: Arizona Department of Health Services, 2019b.

Maternal and Child Health Indicators by Race and Ethnicity

Pregnant and Parenting Teens

DHS (2017) reported that in 2015, American Indian/Alaska Native females had the highest rates of teen pregnancies, with 26.8 pregnancies per 1,000 females ages 10-19 years, compared to 16.6 pregnancies per 1,000 African American females in this age group, and 10.5 pregnancies per 1,000 White, non-Hispanic females in this age group.

Underutilization of Prenatal Care

American Indian/Alaska Native and African American women had the highest rates of not receiving prenatal care in the 1st trimester (DHS, 2017). Native American mothers had a rate of 41.5 per 100 live births not receiving care in the 1st trimester and African American women had a rate of 37.8 per 100 live births for not receiving care during this time frame. These rates are compared to White, non-Hispanic mothers who had a rate of 26.8 per 100 live births not receiving prenatal care during this critical time.

Birth Complications

DHS (2017) reported that in 2015, Native American and African American babies had high rates of birth complications compared to other racial/ethnic groups in Arizona. Birth complications include preterm birth (< 37 weeks gestation), low birth weight (<2.500 grams), very low birth weight (<1,500 grams), and infant mortality. Children born with a low or very low birth weight are more likely to have cognitive delays, which is a risk factor that is correlated with increased child maltreatment (Wu, et al., 2004; Crosse, Kay & Ratnofsky, 1993). High rates of birth complications are related to factors such as high rates of poverty, limited access to health care services, and underutilization of prenatal care (Sarche & Spicer, 2008).

Adverse Childhood Experiences

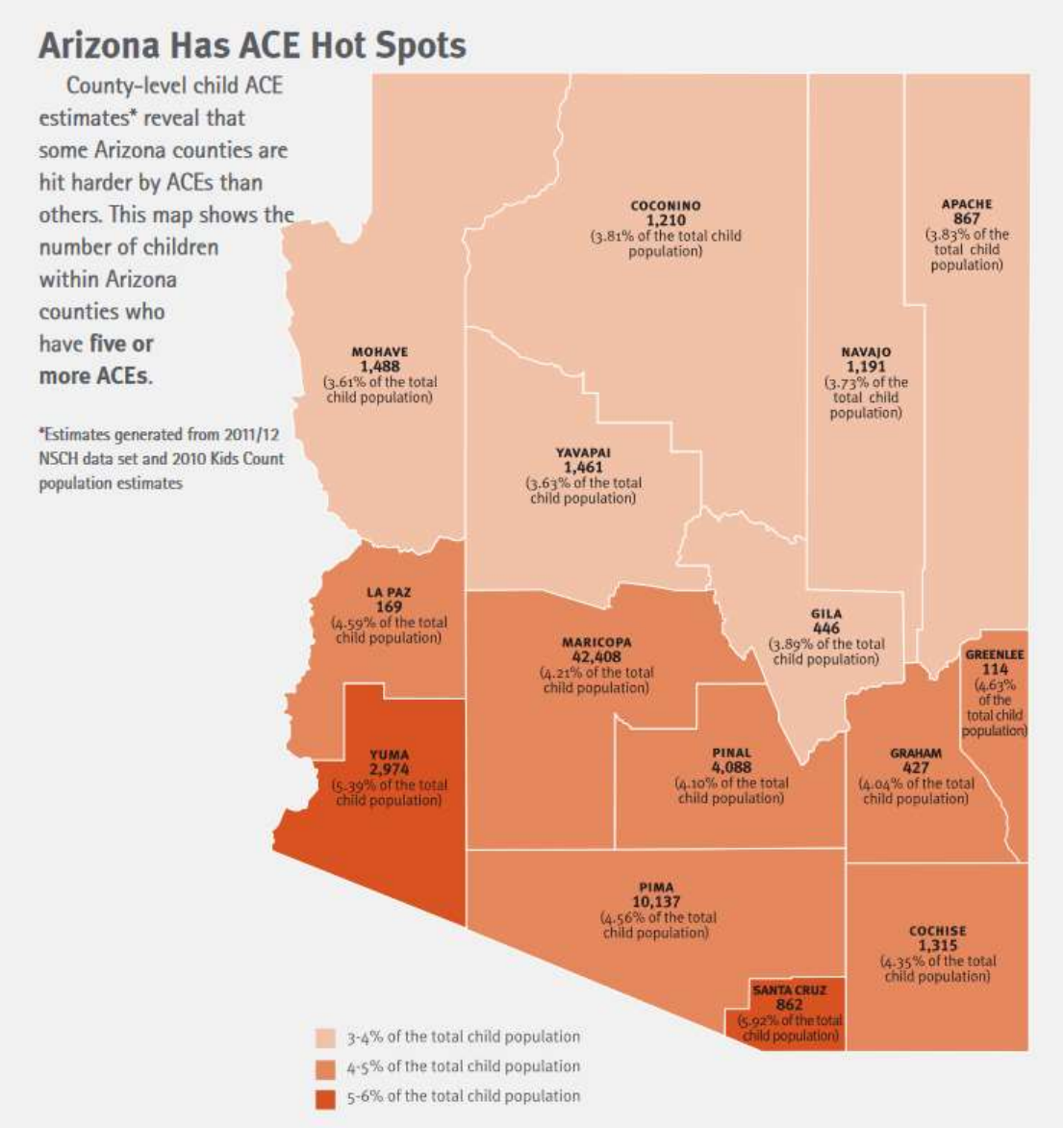
Adverse Childhood Experiences (ACEs) include a range of experiences that can lead to trauma and toxic stress, which can impact early and lifelong health and well-being of children, especially those who experience compounding effects of multiple ACEs (Felitti et al., 1998; Moore & Ramirez, 2016). Data from the 2017 National Survey of Children's Health (NSCH) reports that 24% of children in Arizona (ages birth to 17 years) had experienced two or more ACEs from a list of nine (e.g., economic hardship, parent divorce, death, incarceration, family and neighborhood violence, alcohol/drug abuse, mental illness), as reported by their parents (Child & Adolescent Health Measurement Initiative [CAHMI], 2017). Compared to other states, Arizona has the 13th highest rate of children with two or more ACEs, compared to Oklahoma, with the highest rate of 30%, and the U.S. rate of 19%.

The Phoenix Children's Hospital, as part of the Arizona ACEs Consortium[5], analyzed 2012 NSCH data by county, revealing that Arizona has "hot spots," most notably Yuma and

[5] See: https://azaces.org/

Santa Cruz Counties, where a high proportion of children in those counties had experienced five or more ACEs; see Exhibit 12 below.

Exhibit 12. Percent of Children with Adverse Childhood Experiences (ACEs), 2016



Source: Phoenix Children's Hospital, 2017

Child Fatalities

The Arizona Department of Health Services (DHS, 2018) Child Fatality Review (CFR) teams review and report on child mortality rates in Arizona, with the goals of reducing preventable child fatalities by reducing risk factors that are associated with child deaths, promoting protective factors that may prevent a death, and targeting prevention strategies. Ordered by 2017 child mortality rates of child deaths per 100,000 children, Exhibit 13 shows

that American Indian/Alaskan Native children and African American children have had disproportionally higher rates of child fatalities over time, compared to children of other racial/ethnic groups.

Exhibit 13. Child Mortality Rates* in Arizona by Race/Ethnicity, 2012-2017

Race/Ethnic Group	2012	2013	2014	2015	2016	2017
American Indian/Alaskan Native	92.5	76.7	53.4	78.6	80.8	76.2
African American	96.9	103.3	67.3	74.4	79.9	75.5
Hispanic	55.0	49.6	57.7	46.9	49.5	46.2
White, non-Hispanic	36.8	38.5	41.0	36.7	34.4	41.9
Asian	69.0	35.7	22.3	32.0	46.4	34.8

Source: Arizona Department of Health Services, 2018 *Child deaths per 100,000 children.

Child Fatality Review teams reported that 42% (n=337) of the 806 child deaths that occurred in Arizona in 2017 could have been prevented (DHS, 2018). A child's death is considered to be preventable if the community or an individual could reasonably have done something that would have changed the circumstances that led to the child's death. The most common cause of infant deaths was unsafe sleep suffocation often associated with bed sharing. Child fatalities due to child maltreatment accounted for 10% (n=79) of all child deaths in Arizona. Nearly 3 out of 4 children who died from maltreatment were under age 5 (71%, n=56). Additionally, African American and American Indian/Alaskan Native maltreatment deaths were disproportionately higher than the population they comprise in Arizona. Child neglect caused or contributed to 72% (n=57) of these deaths. Child Fatality Review teams reported that 100% of child maltreatment deaths in Arizona in 2017 were preventable and these deaths made up 24% of all preventable deaths among children during this year. The most common preventable factor was substance use/abuse, associated with 65% (n=52) of child maltreatment deaths. An unsafe sleep environment accounted for 16% (n=13) of maltreatment deaths. Additionally, lack of supervision, lack of access to water, and access to firearms resulted in 13% (n=10) of preventable maltreatment deaths. More than one factor may have been identified for each death.

Families and children in the state of Arizona continue to have significant needs as they seek to thrive in diverse communities across the state. According to the 2019 KIDS COUNT DATA BOOK[6], Arizona is ranked 46th out of 50 states in overall child well-being. Of particular note for the implementation of Healthy Families are the following factors:

[6] See: http://azchildren.org/wp-content/uploads/2019/02/KIDS-Count-2019-final-web.pdf

- *Tremendous Growth in Child Population:* Healthy Families Arizona is serving a growing child population with more need. According to the 2019 KIDS COUNT DATA BOOK, Arizona is rated as the state having the most growth of the child population that has outpaced the 1990-2017 national average while Arizona has dropped in its state ranking of overall child well-being. In 1990 Arizona's ranking for overall child well-being was 39th and in 2019 it is ranked 46th out of 50 states.
- *Growing Diversity of Arizona Children and Families:* Healthy Families Arizona is engaging a more diverse population of families and children each year. A large proportion of children age in Arizona (44%) identify as being of Latino/Hispanic ethnicity. In addition, poverty affects children of color disproportionately in Arizona, with 45% of Native American children, 35% of Hispanic/Latino children, and 31% of African American children living in poverty in 2016, compared to 13% of White children. In Arizona, African American children are 2.5 times more likely to be in poverty than their White peers (Murphey, Belford, Balding, & Beckwith, 2018)[7], have higher rates of reported child maltreatment, and were disproportionately more likely to die from prematurity, unintentional injuries, sudden unexplained infant death, and maltreatment related deaths (DHS, 2018)[8].
- *Needs Vary Considerably by Geographic Area:* Healthy Families Arizona is serving very different regions and must maintain program fidelity along with equity in the quality of service provision across these regions. Rural areas of the state have considerably more need and fewer resources for families and children. In addition, there are some counties that represent more challenges to service provision than others. For example the Phoenix Children's Hospital, part of the Arizona ACEs Consortium[9], reports that Arizona has "hot spots," most notably Yuma and Santa Cruz Counties, where a high proportion of children have experienced five or more ACEs. Adverse Childhood Experiences (ACEs) include a range of experiences that can lead to trauma and toxic stress, which can impact early and lifelong health and well-being of children, especially those who experience compounding effects of multiple ACEs (Felitti et al., 1998; Moore & Ramirez, 2016)[10].

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[7] Murphey, D., Belford, J., Balding, S., & Beckwith, S. (2018). In 33 states, Hispanic or black children are more than twice as likely to be in poverty than their white peers. Child Trends. Retrieved from https://www.childtrends.org/in-33-states-hispanic-or-black-children-are-more-than-twice-as-likely-to-be-in-poverty-than-their-white-peers.

[8] Arizona Department of Health Services. (2017). Differences in the Health Status Among Racial/Ethnic Groups in Arizona, 2015. Phoenix, AZ: Author. Retrieved from: https://pub.azdhs.gov/health-stats/report/dhsag/dhsag15/ethnic15.pdf.

[9] See: https://azaces.org/

[10] Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death

A Focus on the Research and Evidence in Home Visitation

Research Informs Standards of Practice in Arizona

A significant source of funds to support home visitation programs in Arizona is provided through the First Things First (FTF), Arizona's Early Childhood state agency. FTF has reviewed research and evaluation findings on home visiting programs in order to develop guidance or standards of practice for local agencies implementing home visiting models. Through these efforts, Healthy Families Arizona has been identified as an evidence-based home visitation model.

According to the *Home Visitation Standards of Practice (SFY2019)* developed by FTF[11], comprehensive, evidence-based home visitation programs provide participating families of infants and toddlers with information, education, and support on parenting, child development and health topics while simultaneously assisting with connections to other resources or programs as needed. Decades of research nationally demonstrates that home visitation can be an effective method of delivering family support and child development services. A variety of evidence-based models exist to address the spectrum of universal, targeted, or specialized needs of particular populations such as first-time families, parents, and caregivers, teen parents, families at-risk for abuse-neglect, or low-income families. Home visiting shows promise as a way to work with families who may be difficult to engage in supportive services and often the best way to reach families with young children is by bringing services to their homes. The experience and credentials of the home visitor, the duration and intensity of the visits, and the end goal or focus of the intervention are critical to implementation and intended impacts.

First Things First reports that the research emphasizes the population that benefits most from home visitation programs are infants and toddlers in high-risk families. The first three years in a child's life is a critical period for brain development. During this time, the brain forms neural connections at a rapid pace, which lays the foundation for cognitive, emotional, and physical development that can set young children on a positive trajectory for school success. A child's brain development is strengthened having stable relationships with caring and responsive adults, safe and supportive environments, and adequate nutrition. Negative experiences and toxic stress in the early years can disrupt brain

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in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14(4), 245-258. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/9635069.Citation…

[11] See: http://www.azftf.gov/WhoWeAre/HowWeWork/Documents/Home_Visitation_Standards_of_Practice.pdf

development and can have significant irreversible damage on the immature brain. Children who have a disability or are exposed to risk factors such as poverty, abuse and neglect, maternal depression, parental substance use disorder, and poor relationships with caregivers are most susceptible to suffering the effects of negative experiences. Intervening early to support families in developing positive relationships with their infants and toddlers can promote good parenting practices and healthy development. Equipping parents with the appropriate tools and knowledge to act early and advocate for their children is essential. Additionally, early detection and appropriate developmental and behavioral services and supports are critical to significantly improve school readiness, academic success, development, and overall well-being. Effective early childhood interventions can provide a variety of supports for infants and toddlers and their families that may be in the form of learning activities, therapeutic interventions, social-emotional supports, or family education and training on parenting, child development, and health and wellness. High-quality services and supports can change a child's developmental trajectory and ultimately improve outcomes for children, families, and communities.

Home Visiting Evidence of Effectiveness Review (HomVEE) (October 2018)

Federal funding supports the implementation of the Healthy Families model in Arizona so of particular relevance was the recent federal Office of Planning, Research and Evaluation of the Administration for Children and Families, published *Home Visiting Evidence of Effectiveness Review* (October 2018)[12]. This review was launched in fall 2009 to conduct a thorough and transparent review of the home visiting research literature. HomVEE provides an assessment of the evidence of effectiveness for home visiting models that serve families with pregnant women and children from birth to kindergarten entry (that is, up through age 5). The HomVEE review provides information about which home visiting models have evidence of effectiveness as defined by HHS, as well as detailed information about the samples of families who participated in the research, the outcomes measured in each study, and implementation features of each model. The level of evidence needed to be considered "evidence-based" was that the model must meet at least one of the following criteria:

- At least one high- or moderate-quality impact study of the model finds favorable, statistically significant impacts in two or more of the eight outcome domains; or

[12] See: https://homvee.acf.hhs.gov/

- At least two high- or moderate-quality impact studies of the model using non-overlapping analytic study samples find one or more favorable, statistically significant impacts in the same domain.

While the HomVEE review found various types of evidence of effectiveness for 20 models, the Healthy Families America model was unique. Healthy Families America had one or more favorable impacts in each of the eight (outcome) domains. Outcomes include primary measures—collected through direct observation, direct assessment, administrative records, or self-report using a standardized (normed) instrument—or secondary measures (all other self-reported). None of the models, however, showed impacts on a primary measure of reductions in juvenile delinquency, family violence, and crime. Most models had favorable impacts on primary measures of child development and school readiness and positive parenting practices. *Healthy Families America has the greatest breadth of favorable total findings, with favorable impacts on primary and/or secondary measures in all eight domains. Both Healthy Families America and Nurse Family Partnership had the greatest breadth of favorable primary findings, with favorable impacts on primary measures in six outcome domains.*

Relevant to the issues identified earlier in this report regarding family needs and the implementation of the Healthy Families model in Arizona, this exhaustive review of the research also identified gaps in the research in the existing literature on home visiting models. Of critical note is the second finding cited below regarding a limited understanding of how well home visiting works with different type of families:

- The HomVEE review identified several gaps in the existing research literature on home visiting models that limit its usefulness for matching models to community needs. First, research evidence of model effectiveness is limited. As noted earlier, many models do not have high- or moderate-quality studies of their effectiveness; thus, policymakers and program administrators cannot determine whether those models are effective. Other models have only a few high- or moderate-quality studies, indicating that additional research on those models may be needed.
- Second, more evidence is needed about the effectiveness of home visiting models for different types of families with a range of characteristics. Overall, the studies included in the HomVEE review had fairly diverse study samples in terms of race/ethnicity and socioeconomic status. However, sample sizes in these studies are not typically large enough to allow for analysis of findings separately by subgroup. HomVEE found little or no research on the effectiveness of home visiting models for military families.

Mother and Infant Home Visiting Program Evaluation-Strong Start (MIHOPE-Strong Start)

In January 2019, the federal Office of Planning, Research and Evaluation also published an eagerly anticipated study, *The Effects of Home Visiting on Prenatal Health, Birth Outcomes, and Health Care Use in the First Year of Life: Final Implementation and Impact Findings from the Mother and Infant Home Visiting Program Evaluation-Strong Start*[13]. The Mother and Infant Home Visiting Program Evaluation-Strong Start (MIHOPE-Strong Start) was launched in 2012 to test whether evidence-based home visiting provided during pregnancy improves birth outcomes, prenatal health, and health care use in infancy. Specifically, the MIHOPE-Strong Start analysis includes 2,900 families across 66 local HFA and NFP home visiting programs in 17 states. A few prior studies of evidence-based home visiting models — specifically, Healthy Families America (HFA) and Nurse-Family Partnership (NFP) — revealed some improvements in low birth weight and preterm birth. However, these results have not been found in all prior studies of the models' examinations of birth outcomes and were conducted years ago, from the late 1970s through the early 2000s. Given that both families and local programs have changed since those studies were completed, a new test of whether home visiting programs can improve birth outcomes was warranted. This study reported no statistically significant effects on the study focal outcomes. Another critical finding was that the effects of the home visiting programs were not greater for higher-risk or for lower-risk families or depending upon how the programs were implemented.

This study has generated a lot of discussion in the home visitation research and policy-making communities. As with all research efforts, there are limitations to consider when interpreting findings. One in particular discussed by these researchers was that these families while disadvantaged in their sociodemographic characteristics and on some other indicators, were not particularly high risk in their health behaviors, access to nutritional forms of support, or access to health care. On these indicators, there was limited room for home visiting to make a difference among the sample.

Results of rigorous research are important to consider for those directing the implementation of Healthy Families Arizona. The investigators in this study conclude by stating: While MIHOPE-Strong Start examined the relationship between home visiting and birth outcomes observed in 66 local HFA and NFP programs, it should be noted that both of these models have produced positive impacts in important areas beyond the ones examined in this study, including improving positive parenting practices, child

[13]See: https://www.acf.hhs.gov/sites/default/files/opre/mihope_strong_start_final_report_final508_3.pdf

development, and the home environment, and reducing child maltreatment (and) some important impacts may not emerge until later in the child's life. For example, cost-benefit analyses of evidence-based home visiting have found that program benefits exceed costs to society, including government spending, when the child is school age but usually not earlier.

A Summary of Recent Literature[14]

Overall, home visiting programs are believed to produce at least modest benefits (Filene et al. 2013; Azzi-Lessing 2017; Nievar et al. 2010). For example, Nievar et al. (2010) examined 29 studies and found weighted mean effect size of 0.37. The authors concluded "home visitation for low-income or at-risk families improves maternal behavior" (p. 13). Filene et al. (2013) examined 51 studies and found an average effect size of 0.20 noting the effects varied by category with maternal life course, child cognitive outcomes, and parent behavior and skills showing positive average effect sizes.

Other studies find benefits for some participants but not others (DuMont et al. 2008; Matone et al. 2012). Such variability in effects is understandable given the diverse set of characteristics and circumstances present in the lives of program participants. A single mother with one child is different than a single mother with three children. Also, certain measures may be more sensitive to change depending on the participant and the outcome measure selected (LeCroy and Krysik 2010).

Quality of implementation may vary by site, and research has found benefits in some sites but not others (Olds et al. 1999), or in accredited programs (DuMont et al. 2008; LeCroy and Davis 2016) but not in non-accredited ones (Duggan et al. 2004). An increasing interest in implementation suggests that program outcomes are impacted by various implementation factors such as retention, home visits completed, curriculum content covered, alliance with the home visitor, and caseload (Nievar et al. 2010). Because of these variations, it is important to study program outcomes across a variety of programs and in multiple settings.

As reported in the 2018 annual report, over the past decade, there have been seven randomized trials conducted of the Healthy Families program (see DuMont et al., 2008; Jacobs et al., 2015; LeCroy & Krysik, 2011; LeCroy & Davis, 2016; LeCroy & Lopez, 2018; Rausch, McCord, Batista, & Anisfeld, 2012; Rodriguez, Dumont, Mitchell-Herzfeld, Walden, & Greene, 2010; and Green, Tarte, Harrison, Nygren, & Sanders, 2014). These

[14] LeCroy, C. and Lopez, D. (2018) *A Randomized Controlled Trial of Health Families: 6-Month and 1-Year Follow-Up.* Society for Prevention Research.

studies add different findings in terms of outcomes, populations, subgroups, and settings. For example, the Jacobs et al. (2015) study focused on adolescent parents and key findings included decreased stress, improved educational attainment, less risky behavior, and less intimate partner violence among the Healthy Families participants. Rausch et al. (2012) focused on a Dominican immigrant population and found that participation in the intervention resulted in increased use of primary care physicians, increased breastfeeding, and improved child development outcomes when compared to a control group.

Rodriquez et al. (2010) examined impacts based on observational data and found the program was effective in fostering positive parenting behaviors such as responsivity and engagement when contrasted to the control group; additionally, a subgroup of first-time mothers revealed significantly less harsh parenting practices than the control mothers. LeCroy and Lopez (2018) conducted a randomized controlled trial that examined 6-month and 1-year follow up data. Results favored the Healthy Families intervention group over time in comparison to the control group in: use of resources, improved home environment, fewer subsequent pregnancies, increased problem solving, and reduced violence in the home.

Healthy Families Arizona Program Updates

New Team in Apache and Navajo Counties

On October 1, 2018, Northland Therapy Services received funding from the Department of Child Safety to begin serving families in Apache County and Navajo County. Northland Therapy was able to hire staff and started recruiting and serving families in November 2018.

Advisory Board Participation

The Advisory Board provides support and recommendations to Central Administration (housed within the Department of Child Safety) and consists of individuals from state agencies, local organizations, and volunteers committed to the Healthy Families Arizona program. During 2019 the evaluation staff from LeCroy & Milligan Associates continued to participate as active members on the Advisory Board. Staff provided presentations of evaluation findings, the progress of the transition to a new online data system, and reviewed and commented on policy updates shared with the Advisory Board by Healthy Families Arizona Central Administration.

State Opioid Response Grant

Starting July 1, 2019, Healthy Families Arizona received an additional $2 Million in funding through September 29, 2020. These funds come from the Arizona State Opioid Response Grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) administered by the Arizona Health Care Cost Containment System (AHCCCS). This money is being used to provide services to families who have a history of substance use. This funding helps replace the Title IV-E waiver funding that ended in September 2019. Families who are receiving Healthy Families Arizona services and funded by this source are indicated as such in the overall evaluation. However, there is no separate analysis conducted specific to these families.

Training and Professional Development

Several trainings occurred between July 1, 2018 and September 30, 2019 including the following:

- Peer Review Training provided by Healthy Families America September 25-27, 2018. The training was attended by two Healthy Families Arizona Statewide Coordinators and 29 direct service staff members.

- One Healthy Families Arizona state coordinator attended an additional Peer Review Training in Chicago, IL April 30-May 2, 2019. This training was completed to meet Central Administration credentialing requirements.
- At the Statewide Quarterly Supervisor Meeting on April 24, 2019, Barbara Weigand MSW (retired clinical professor from Arizona State University) gave a training on "Understanding Reflective Supervision" to the Supervisors and Program Managers in attendance.
- Two Statewide Coordinators, the statewide evaluator, and 21 direct service staff members attended the Healthy Families America/Prevent Child Abuse America national conference in Milwaukee, Wisconsin September 16 – 18, 2019.
- A total of three Parent Survey trainings for Family Assessment Workers (FAW) and supervisors were held November 2018, April 2019, and September 2019.
- A total of six Foundations of Family Support for Family Support Specialists (FSS) and supervisors were held August 2018, December 2018, February 2019, May 2019, August 2019, and September 2019.
- Central Administration continues collaboration with the evaluation team, LeCroy & Milligan Associates, to support consistent delivery of CORE training.
- Additional trainings were held locally within agencies throughout the state in support of home visiting.
- Several Healthy Families Arizona service staff also attended the Prevent Child Abuse Arizona Conference, the First Things First Early Childhood Summit, and the Strong Families Arizona Conference in July, August, and September 2019 respectively.

2019 Statewide HFPI Training Activity

Home visiting staff and supervisors also received training on the Healthy Families Parenting Inventory (HFPI) provided by LeCroy & Milligan Associates. The HFPI is an assessment tool that is used to provide home visitors with insight into the families they serve and how they can best support their parenting skills. A total of 161 staff received training over six sessions in April and May 2019. Home visitors indicated on satisfaction surveys that they felt better prepared to use the HFPI as a tool to help support the families and provide better services.

Quality Assurance and Technical Assistance

In August 2018, Juanita Celis was hired as a Statewide Coordinator to bring the Healthy Families Arizona Central Administration staff at the Department of Child Safety up to three members. In September 2019, Amy Hodgson resigned, and Pauline Haas-Vaughn was promoted to Statewide Program Manager. The Statewide Coordinators and Statewide

Program Manager all have extensive experience with Healthy Families Arizona and provide support and oversight to all teams providing services throughout the state.

Collaboration between First Things First, Arizona Department of Health Services and Department of Child Safety

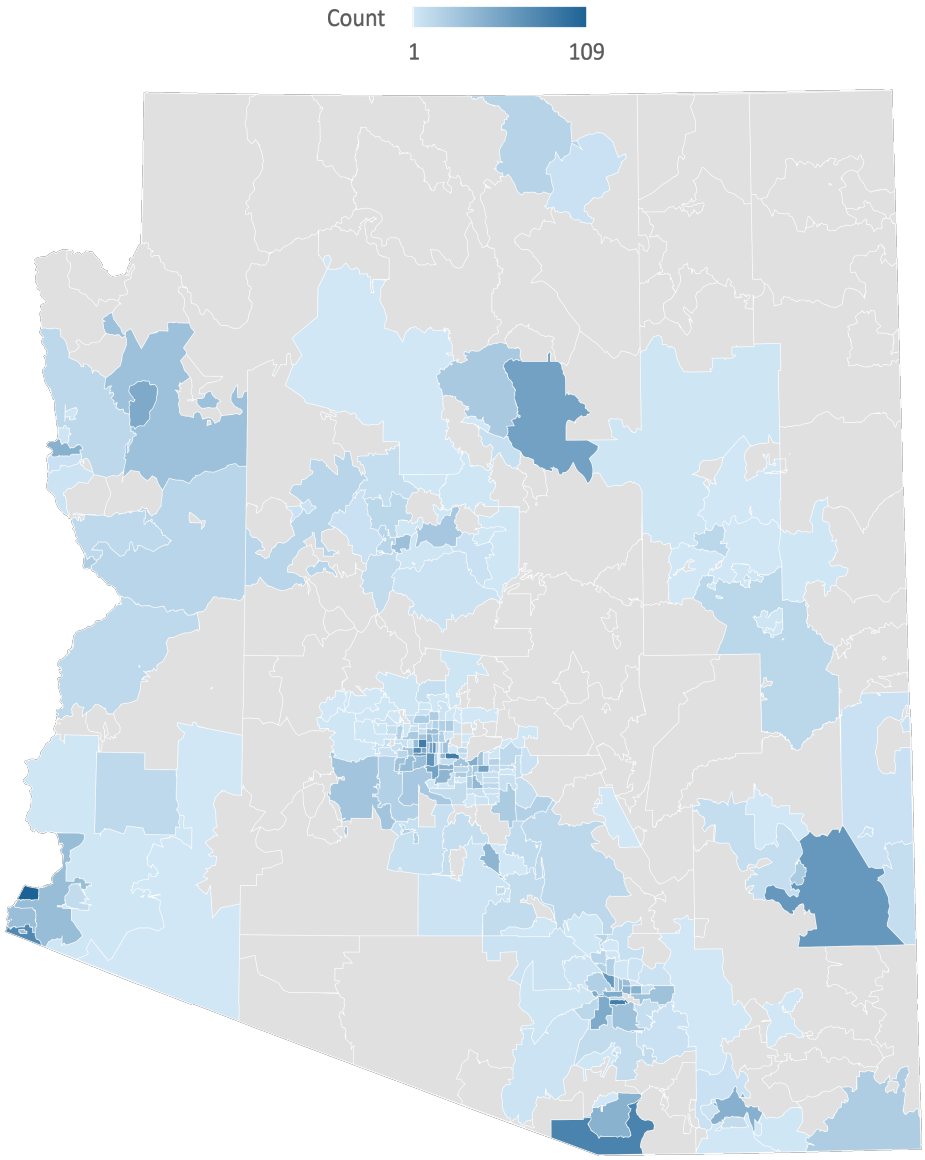
Healthy Families Arizona Central Administration housed within DCS continues to participate in statewide coalitions to increase collaborative efforts with FTF and DHS. Healthy Families Arizona Central Administration focuses on maintaining healthy working relationships with FTF and DHS to support model fidelity and consistency across the program's statewide evaluation, training, quality assurance, technical assistance, program development, administration, and any other program related activity. Collaboration occurs in a variety of settings both formally and informally. Healthy Families Arizona Central Administration discusses budget and funding frequently with DHS and reviews monthly reports and billing. In addition, Healthy Families Arizona Central Administration participates in the Inter-agency Leadership Team which is a joint effort between DCS, DHS, FTF, and several other agencies to work collaboratively to improve services offered to Arizona families. MIECHV funding received through DHS requires participation in a Continued Quality Improvement (CQI) component by MIECHV funded Healthy Families sites to improve outcomes such as child immunizations rates throughout the state.

Beginning in 2018, Healthy Families Arizona Central Administration began an extensive collaborative project with FTF and DHS to update and modify the forms used across all Healthy Families Arizona teams. These efforts were to prepare all of Healthy Families Arizona in the home visiting integrated data system called the AZ Efforts to Outcomes (AZ ETO) database previously used only by MIECHV teams. The transition of teams use of the ETO system was multi-staged, with MIECHV and FTF funded teams starting in August 2018 and teams funded through DCS in April 2019. Starting in August 2018, all teams began using a revised set of data collection forms to meet the needs of all funders as well as national credentialing standards. This required some additional training with staff on the new forms as well as training on the ETO data system. Currently the ETO data system is unable to meet the complete reporting needs for the statewide system and is described in the next section.

Healthy Families Arizona Program and Participant Characteristics

Healthy Families Arizona served a total of 4,420 families from July 1, 2018 through September 30, 2019. A total of 2,068 were funded through the Department of Child Safety; 1,324 through First Things First; and 950 through MIECHV. An additional 78 families have outside funding in the Maricopa County area. Families come from 246 different zip codes in 13 counties in the most populous areas of Arizona.

Exhibit 14. Location of Families in Healthy Families Arizona, July 1, 2018 to September 30, 2019



Length of Time in Program and Reasons for Termination

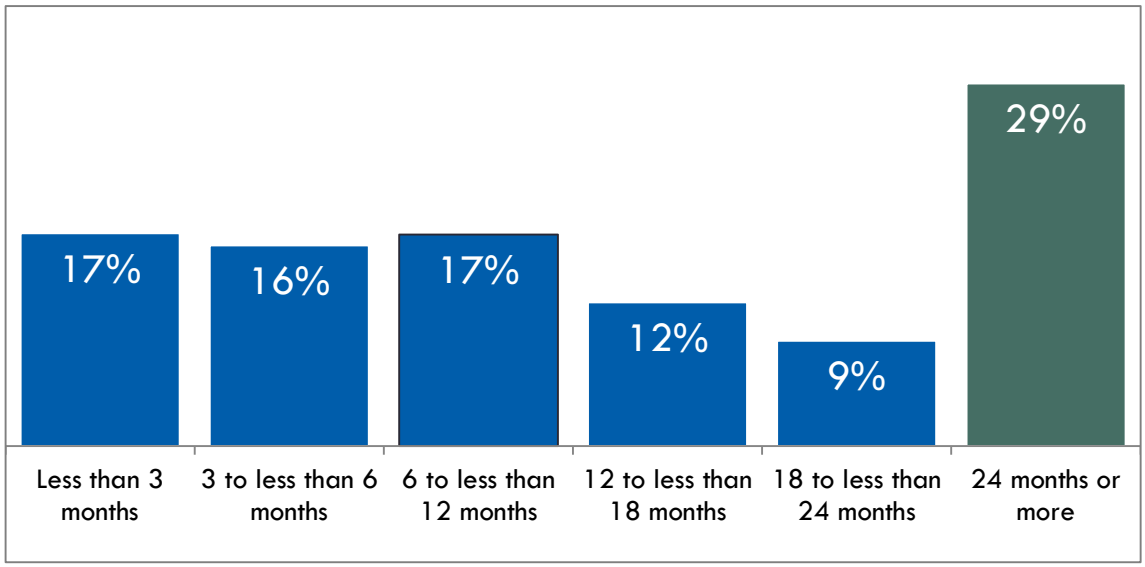
Healthy Families America (HFA) Best Practice Standards recommends that services are offered until the child is at least three years old and can continue up to age five. From July 1, 2018 through September 30, 2019, a total of 2,211 of the 4,420 families closed out of Healthy Families Arizona. Of the 4,420 families served, 2,092 were new enrollments.

Exhibit 15. Families Served in Healthy Families Arizona, July 1, 2018 to September 30, 2019

Program Name	All Families	New Enrollments	Proportion of New Enrollments
Apache County / Navajo County	30	30	100%
Cochise County / Santa Cruz County	242	108	44.6%
Coconino County	114	52	45.6%
Graham County / Greenlee County	151	46	30.5%
Maricopa County	2,273	1,058	46.5%
Mohave County	239	112	46.9%
Pima County	725	331	45.7%
Pinal County	213	138	64.8%
Verde Valley (in Yavapai County)	52	23	44.2%
Prescott Valley (in Yavapai County)	103	56	54.4%
Yuma County	278	138	49.6%
Total Count	**4,420**	**2,092**	**47.3%**

For the newly enrolled families 871 closed (41.6%), for a retention rate of 58.4% which is a decrease from 68.5% in FY18, 75.1% in FY 2017, and 72.5% in FY 2016. The median number of days in the program for families from July 1, 2018 to September 30, 2019 was 357 days, which is less than the 426 in FY 2018, 491 in FY 2017, and 506 in FY 2016. Nearly 30%of all families receiving services are in the program for more than 2 years (Exhibit 16).

Exhibit 16. Families' Length of Time in Program for Healthy Families Arizona Families



Of the 2,211 families that closed, more than half did not complete a year of service. Of considerable note is the increase in the percent of families that closed within the first three months of service. Last year only 6% of families closed within the first three months compared to 17% this year. This lack of engagement in the program may be due to several factors including the changes in data collection that happened in August 2018. This extra burden on the home visitors and families appears to have had an impact on engaging new families and as such changes were discussed, proposed and accepted for FY 2020. Exhibit 17 shows the distribution of length of time that families stayed in the program for all families who closed during July 1, 2018 to September 30, 2019.

Exhibit 17. Families' Length of Time to Closure

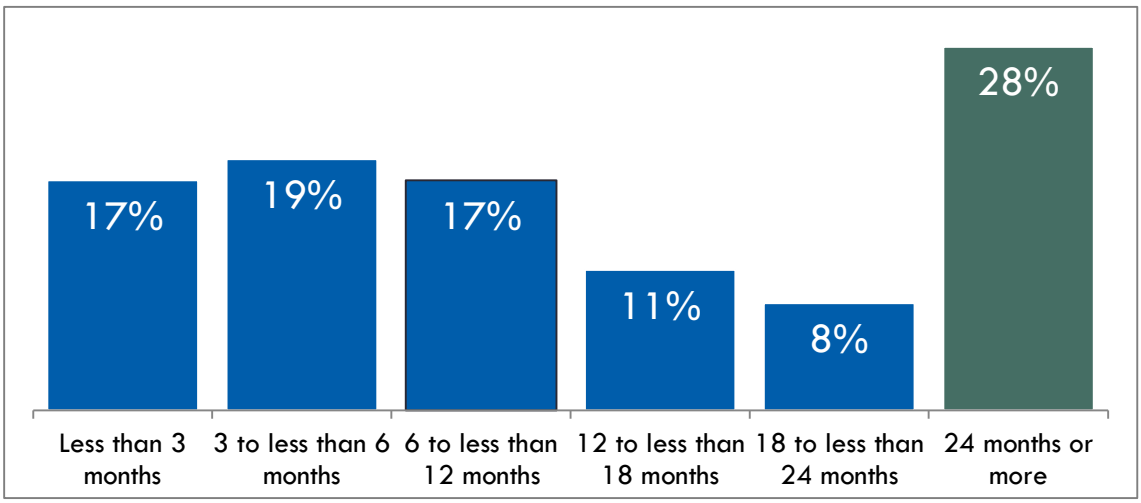


Exhibit 18 shows the most frequent reasons families left the program between July 1, 2018 and September 30, 2019 for all families served as well as families newly enrolled during the period. The most common reasons a family's case was closed in was due to families not responding to outreach efforts, refusing further services, completing the program, or moving. For *newly enrolled* families, the family declining services was the most common accounting for over 30% of closures nearly double last year's percentage. Other top reasons include not responding to outreach efforts and moving away. Program completion should not be a reason for any families newly enrolled and most likely are due to data entry errors by staff.

Exhibit 18. Reasons for Family Closure in Healthy Families Arizona

	All Families Served		Newly Enrolled Families	
Dismissal Reason	**Count**	**Percent**	**Count**	**Percent**
Did not respond to outreach efforts	429	19.4%	179	20.6%
Family declined/refused further services	416	18.8%	267	30.7%
Completed program	348	15.7%	9	1.0%
Moved	266	12.0%	118	13.6%
Self-sufficiency established according to parent	209	9.4%	50	5.7%
Declines worker change	158	7.1%	34	3.9%
Returned to School or Work	101	4.6%	69	7.9%
Unable to locate	97	4.4%	47	5.4%
Family no longer has custody	96	4.3%	60	6.9%
Duplication of services	32	1.5%	12	1.4%
Other	32	1.5%	10	1.2%
Supervisor discretion	15	0.7%	8	0.9%
Inconsistent living situation/homeless	7	0.3%	3	0.3%
Child deceased	3	0.1%	2	0.2%
Adoption	2	0.1%	2	0.2%
No longer pregnant	2	0.1%	1	0.1%
Total Count	**2,213**		**871**	

Referral Source and Level of Service

Families are offered services in the Healthy Families Arizona via various methods. One primary method used by all sites is systematic screenings. These occur at hospitals and clinics throughout Arizona through contractual agreements with the local sites and involve a Family Assessment Worker regularly screening pregnant and postpartum women to offer then services. In addition to this, referrals come from multiple sources including the community (which can include doctors, social service agencies, or community members), self-referrals (which are often because a family has learned of the program through a brochure, website, or an individual), and the Department of Child Safety. The Department of Child Safety provides two types of referrals – general referrals and referrals from families who are offered to participate in the Substance Exposed Newborn Safe Environment (SENSE) program. There is an increase in the percent of families coming from the SENSE program with just over 14% of families newly enrolled referred from the program. This is the third year we have recorded SENSE program referrals and they accounted for 298 enrollments up from 236 in FY 2018 and 214 in FY 2017. Exhibit 19 shows the referral sources for all families and newly enrolled families for July 1, 2018 through September 30, 2109.

Exhibit 19. Referral Sources for Healthy Families Arizona

	All Families Served		Newly Enrolled Families	
Referral Source	**Count**	**Percent**	**Count**	**Percent**
Unknown	96	2.2%	5	0.2%
Community	1,686	38.1%	822	39.3%
DCS	185	4.2%	91	4.4%
DCS/SENSE	425	9.6%	298	14.2%
Self	355	8.0%	150	7.2%
Systematic	1,673	37.9%	726	34.7%
Total Count	**4,420**		**2,092**	

Caregiver Demographics

The Healthy Families Arizona program serves a culturally diverse population. Exhibits 20 to 22 show data on caregiver's ethnicity, race and primary language. Over half of caregivers enrolled in the program self-identify as Hispanic, and that nearly three-fourths of caregivers identify as White/Caucasian, and just over two-thirds of caregivers used English as their primary spoken language at home.

Exhibit 20. Caregiver's Ethnicity

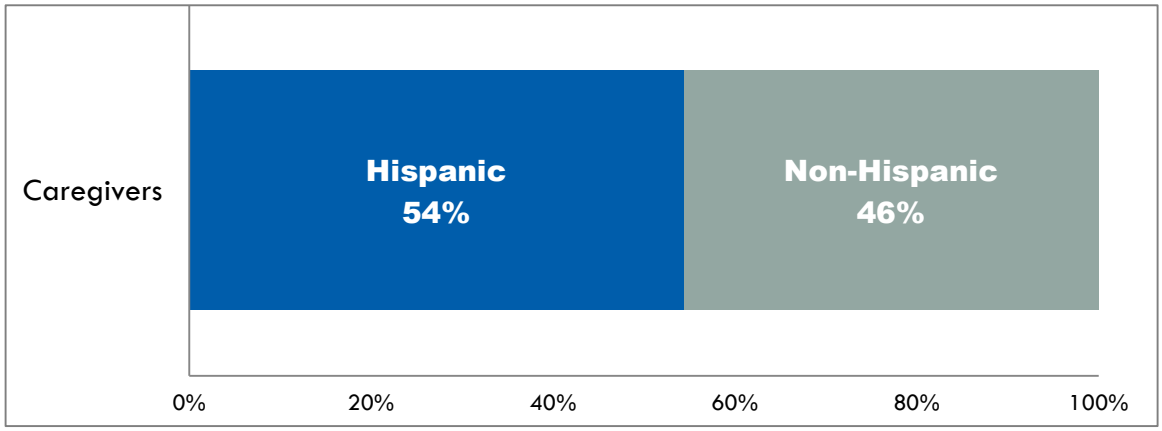


Exhibit 21. Caregiver's Race

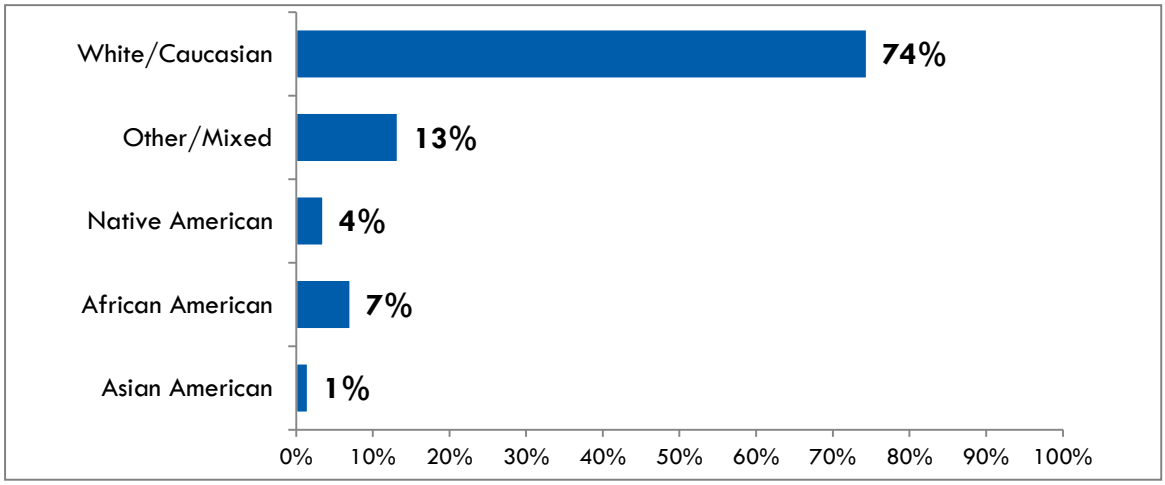
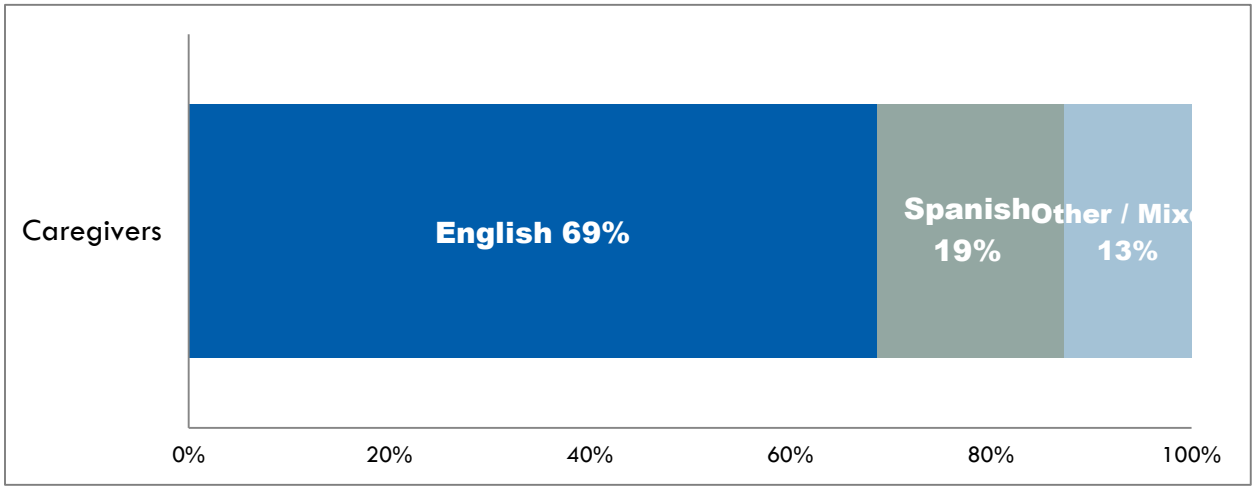
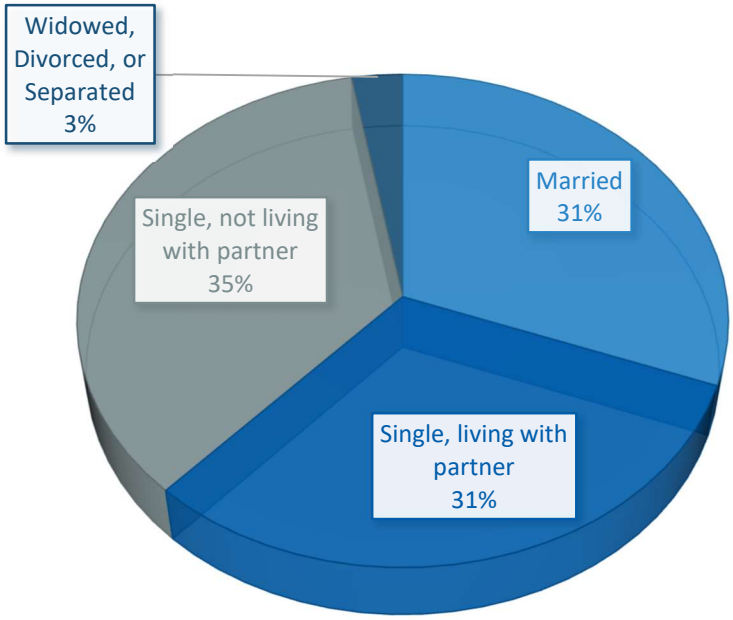


Exhibit 22. Caregiver's Primary Language



The majority of primary caregivers are the birth mother accounting for 99.3% in all families. Fathers are the primary caregiver in 0.5% of families, with grandmothers accounting for the remaining 0.2%. Two-thirds of all caregivers are single whether living with a partner or not.



Maternal Risk Factors

Mothers have certain risk factors than can lead to less favorable childhood outcomes. Healthy Families Arizona takes these risk factors into account during the screening process and tries to provide services to those at highest need. In the Healthy Families Arizona program, mothers have certain risk factors that are higher than the average rates for all mothers in the State of Arizona. Exhibit 23 presents selected risk factors for mothers compared with state rates.

Exhibit 23. Selected Risk Factors for Mothers

Risk Factors of Mothers	Healthy Families Arizona	Arizona State
Teen Births (19 years or less)	11.3%	7.0%*
Births to Single Mothers	69.4%	48.2%*
Less Than High School Education	33.7%	17.8%*
Not Employed	58.8%	33.9%**
Median Yearly Income	$22,800	$56,581 **

Source: *2017 data from the Arizona Department of Health Services Vital Statistics records. **U.S. Census Bureau, American Community Survey, 2017.

The percentage of Healthy Families Arizona mothers who are teenagers at time of birth is still higher than the overall rate for Arizona; however, the percentage has continued to decrease in recent years following the decrease in teen births overall.

The majority of all mothers are single (69.4%) at time of birth. Approximately a third of mothers enrolled in Healthy Families Arizona have less than a high school education (33.7%) compared to less than one in five of all mothers in the State (17.8%). More than half (58.8%) of Healthy Families Arizona mothers are unemployed. The median household income is less than half of that for Arizona as a whole. In relation to the state and national rates, these data confirm that Healthy Families Arizona participants do represent an "at-risk" group of mothers and that the program has been successful in recruiting families with multiple risk factors associated with child abuse and neglect and poor child health and developmental outcomes.

Key Healthy Families Arizona Services

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

Developmental Screening and Referrals for Children

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

The Healthy Families Arizona program administers the ASQ-3 at 4, 6, 9, and 12 months in the first year of the infant's life, every six months until the child is three years of age, and then yearly at age 4 and 5. Screenings can be scored as typical meaning that the child is developing on schedule, questionable which indicates that they may be behind in an area, or delayed which indicates that there is a developmental delay in at least one are of child development that should be address. Referrals are given to families when a child scores as delayed.

A total of 1,938 ASQ-3 screenings were completed and entered into ETO between July 1, 2018 and September 30, 2019 for 1,486 children. The majority of screenings showed typical childhood development (Exhibit 24). Of these families, 1,478 were marked in ETO as having received Healthy Families developmental activities and 219 referrals for services were made (Exhibit 25).

Exhibit 24. Outcomes for ASQ-3 Screenings

Outcome	Count	Percent
Delayed	134	6.9%
Questionable	263	13.6%
Typical	1,541	79.5%
Total	**1,938**	

Exhibit 25. Services and Referrals Provided

Services/Referrals	Count*
Provide HF developmental activities	1,478
Referred to AzEIP or School District	81
Referred to other community services	32
Referred to primary care provider or doctor	47

*Multiple referrals can be given to families. But not all families marked as having a referral had a specific referral type listed.

In addition to the ASQ-3, another measure of childhood development is the Ages & Stages Questionnaire: Social-Emotional (ASQ: SE-2). The ASQ: SE-2 is similar to the ASQ-3 but focuses on screening for social and emotional behaviors: self-regulation, compliance, social-communication, adaptive functioning, autonomy, affect, and interaction with people. The scoring is slightly different with Refer, Monitor, and No Concern as the final score designations. During July 1, 2019 through September 30, 2019, for 2,292 children, a total of 3,820 ASQ: SE-2s were completed (Exhibit 26). More than 90% scored as no concern, with 165 suggesting a referral with a total of 130 referrals given to families.

Exhibit 26. Outcomes for ASQ: SE-2

Outcome	Count	Percent
Monitor	185	4.8%
No concern	3,470	90.8%
Refer	165	4.3%
Total	3,820	

Substance Abuse Screening and Referrals

The relationship between substance abuse and the potential for child maltreatment is strong and well known (Garner et al, 2014). When parents or caretakers have a substance use disorder, children may not be adequately cared for or supervised. While successful substance abuse treatment often requires intensive inpatient or outpatient treatment and counseling, home visitors can still play a critical role in screening for substance abuse, educating families about the effects of substance abuse on their health and the health of their children, and making referrals for treatment services.

Up through September 30, 2019, Healthy Families Arizona used the CRAFFT screening tool as a method of screening for substance use and abuse. The CRAFFT is a short screening tool for adults and adolescents to assess high risk drug and alcohol use disorders. This instrument was developed by the Center for Adolescent Substance Abuse Research (CeASAR) at the Children's Hospital of Boston. A positive screen occurs if there are two or

more "yes" answers out of six questions, which indicates that further assessment and or referrals are recommended.

A total of 2,431 families had CRAFFT data available in the ETO data system. Of these families a total of 1,322 had one at completed at time of enrollment with 31.2% indicating a history of substance use. For newly enrolled families the rate was 27.8%. This is lower than in prior years which was 45.8% in FY 2018. This is most likely due to the incomplete nature of the data collected and does not reflect an accurate picture of substance use history for families.

Starting on October 1, 2019, Healthy Families Arizona will no longer be using the CRAFFT for substance abuse screening and will rely on a Past 30 Day Alcohol, Tobacco, and Other Drug screening (Past 30 day ATOD). The Past 30 Day ATOD became a statewide form in August 2018, and 474 were completed with newly enrolled clients with the following results:

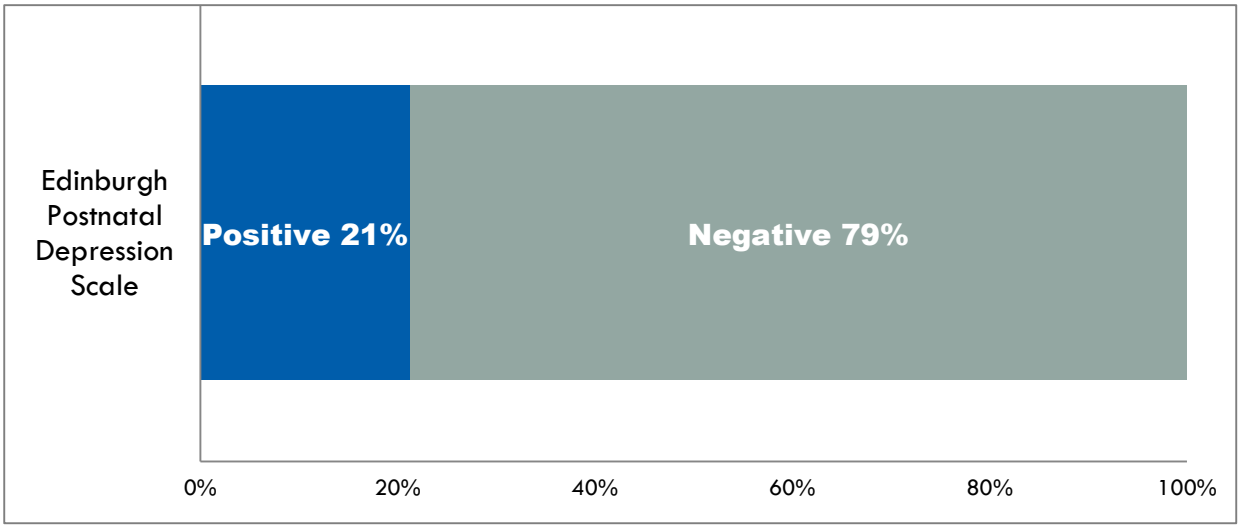
- 1 positive for alcohol, tobacco, and drug use,
- 7 positive for alcohol and tobacco use,
- 2 positive for alcohol and drug use,
- 8 positive for alcohol only,
- 39 positive for tobacco use only,
- 6 positive for tobacco and drug use,
- and 18 positive for drug use only.

Postnatal Depression Screening

The Edinburgh Postnatal Depression Screen (EPDS) was developed for screening postpartum women in outpatient, home visiting settings, or at the 6 –8 week postpartum examination. The EPDS consists of 10 questions scored from 0 to 3 by the parent. The overall screening is then scored and scores of 10 or higher are considered to be a positive screen for depression requiring a referral for services unless they are already receiving services to address their depression. Healthy Families Arizona requires that all families receive a screening within 3 months after the birth of each child.

A total of 2,897 EPDSs were recorded in the ETO data system between July 1, 2018 and September 30, 2019 for 2,252 parents. This resulted in 617 positive screens with 484 referrals given to the parent. An additional 133 were already receiving services to address their depression prior to joining Healthy Families Arizona.

Exhibit 27. Edinburgh Postnatal Depression Screen Results



Child Abuse and Neglect: Collaboration with the Department of Child Safety

A primary goal of Healthy Families Arizona is to reduce the incidence of child maltreatment and abuse. As part of this, Healthy Families Arizona accepts referrals of families directly from Department of Child Safety (DCS) workers as well as the Substance Exposed Newborn Safe Environment (SENSE) program. The SENSE program provides services to families after the birth of a substance exposed child. The families receive a coordinated Family Service Plan of which Healthy Families Arizona home visitation is a part of the plan. Healthy Families Arizona provides supportive services for these and other families involved with the Department of Child Safety (DCS).

Overall from July 1, 2018 through September 30, 2019, one fourth (25.0%) of all families that received services had some level of involvement with DCS (1,105 of the 4,420). This is an increase from 17.8% in the prior year. Of the families with DCS involvement, 610 had DCS or SENSE referrals, with the remaining 495 families referred to Healthy Families Arizona through systematic, community, or self-referrals. Healthy Families Arizona served a total of 425 SENSE referred families during this time accounting for approximately 41% of all DCS involved families. For newly enrolled families, 298 of the 2092 new families were SENSE referrals (14.2%).

Healthy Families Arizona supportive services include:

- acceptance of referrals from DCS;
- providing screening and assessment for parent(s) if the parent(s) wished to determine eligibility to receive program services;
- attending DCS case plan staffing;
- utilizing best practices and a family-centered approach when working with families; and
- coordinating with DCS staff to identify service needs and development of family and child goals.

Family Outcomes

Caregiver Outcomes

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

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

Research from randomized clinical trials of the Healthy Families Arizona program (LeCroy & Krysik, 2011, LeCroy & Davis, 2016) supports the finding that the program can produce positive changes across multiple outcome domains such as parenting support, parenting attitudes and practices, violent parenting behavior, mental health and coping, and maternal outcomes.

Healthy Families Parenting Inventory Reveals Positive Parent Change

To better evaluate critical goals of the Healthy Families program, the evaluation team developed the Healthy Families Parenting Inventory (HFPI) in 2004 (LeCroy, Krysik, & Milligan, 2007). This instrument was developed, in part, because of measurement difficulties identified in the literature (See LeCroy & Krysik, 2010). The development of the HFPI was guided by several perspectives and sources: the experience of the home visitors in the Healthy Families Arizona program; data gathered directly from home visitors, supervisors, and experts; information obtained from previous studies of the Healthy Families program; and examination of other similar measures. The process included focus groups with home visitors, the development of a logic model, and a review of relevant literature. In an initial validation study, the pattern of inter-item and item-to-subscale correlations, as well as an exploratory factor analysis and sensitivity to change analysis, supported the nine-factor model of the HFPI. This work was published in the journal Infant Mental Health (Krysik & LeCroy, 2012). The final instrument includes nine scales: Social Support, Problem-solving, Depression, Personal Care, Mobilizing Resources, Role Satisfaction, Parent/Child Interaction, Home Environment and Parenting Efficacy.

Healthy Families Parent Inventory (HFPI) Subscales

This section describes the results of paired t-test analyses obtained for each subscale of the HFPI. The level of significance is reported along with magnitude of the *effect size.* An effect size gives a sense of how large the change or improvement is from baseline to 6 months or 12 months. Effect sizes below 0.20 are considered small changes and those between 0.20 and 0.50 are considered small to medium changes. These findings are based on data reported from the sites and entered into ETO. The analysis is done with participants who completed both instruments at the baseline and 6-month intervals (n=1,176) and participants who also had matched instruments at the 12-month interval (n=695).

Exhibit 28. Change in Subscales of the HFPI

Sub- scale	Significant improvement from baseline to 6 months	Significance	Effect size	Significant improvement from baseline to 12 months	Significance	Effect size
Social Support	✓	.043	small	No	.089	small
Problem-solving	✓	.000	small	✓	.000	medium
Depression	✓	.000	small	✓	.000	small
Personal care	✓	.000	small	✓	.000	medium
Mobilizing resources	✓	.000	medium	✓	.000	medium
Commitment To Parent Role	✓	.000	small	✓	.000	small
Parent/Child Interaction	✓	.000	medium	✓	.000	medium
Home Environment	✓	.000	medium	✓	.000	medium
Parenting Efficacy	✓	.000	small	✓	.000	medium

As shown above in Exhibit 28, from baseline to 6 months and baseline to 12 months, there were statistically significant changes in all subscales except the Social Support at 12 months. The largest improvements (as shown by the effect sizes) at 6 months after entering the program are in the categories of: home environment (0.29); mobilizing resources (0.27); and parent/child interaction (0.25). At 12 months the largest improvements are in: home environment (0.51) and mobilizing resources (0.40). Overall at 12 months the effect sizes are

larger and show greater improvement on all subscales except for Social Support. This has been a consistent finding over the years.

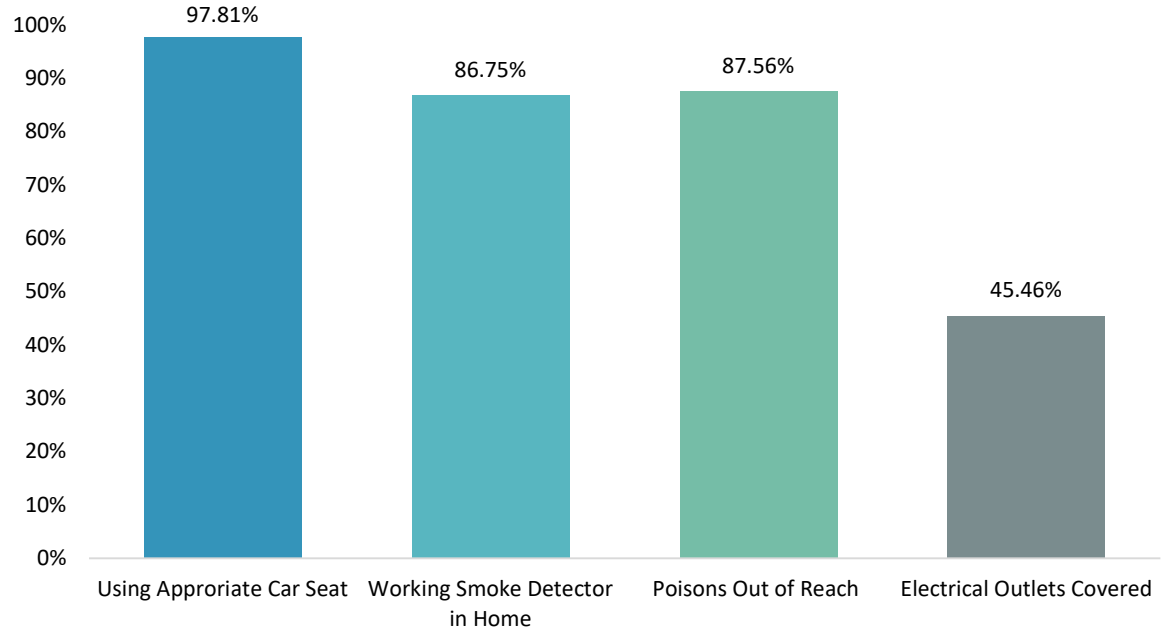
Overall these results indicate that the Healthy Families Arizona sites are effective at improving the atmosphere of the home, connecting parents to resources, and helping strengthen the parent child relationship.

Safety Practices in the Home

Unintentional injuries are the fifth leading cause of death for infants under the age of 1 according to the CDC. Suffocation is the leading cause of preventable infant deaths. One of the first messages that Healthy Families Arizona home visitors deliver to their families is the importance of how to put infants down to sleep safely. All families receive this information within the first couple of visits and continues to be a common topic of discussion throughout their home visits.

The Healthy Families Arizona home visitors both assess and promote safe environments for children. The home visitors provide education about safety practices and monitor safety in the home through the completion of the safety checklist with the family. From July 1, 2018 to September 30, 2109 a total of 2,468 had safety checklist information entered into the data system. Exhibit 29 reports the use of four key safety practices for families. Families who continue to participate in Healthy Families Arizona see increased safety practices and higher rates of safety.

Exhibit 29. Percentage of Families Implementing Safety Practices



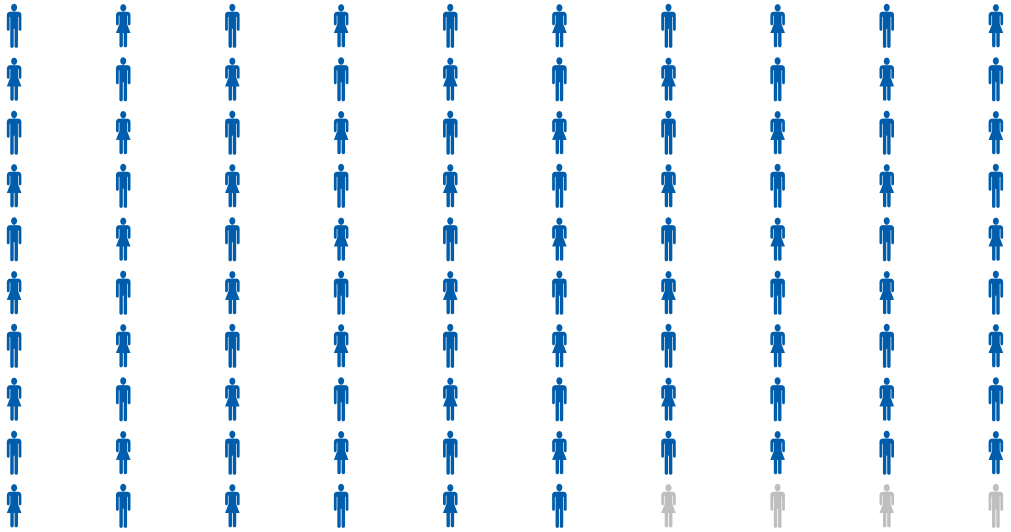
Child Maltreatment

One of the main goals of Healthy Families Arizona is to reduce the incidence of child maltreatment, inclusive of all forms of child abuse and neglect. In order to look at child maltreatment directly, data from CHILDS, the Arizona Department of Child Safety data system, is used to determine the rates for Healthy Families Arizona participants. It is important to acknowledge that using official child abuse and neglect data as an indicator of program success is complex and is unlikely to fully answer the question about the effectiveness of Healthy Families Arizona in preventing child maltreatment. The shortcomings in using official child maltreatment rates to assess the effectiveness of home visiting programs have been discussed in numerous journal articles (see for example, *The Future of Children*, 2009).

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

In order to best represent families that have received a significant impact from the Healthy Families Arizona program, only families that have been in the program for at least six months are analyzed to determine if they have a substantiated report of child abuse or neglect. This year 96.3% of the Healthy Families Arizona eligible families, 2,852 out of 2,960 families, were without a substantiated report, as illustrated in Exhibit 30. This is the same rate as state fiscal year 2018. A total of 108 reports were substantiated after investigation. A substantiated finding means that "the Department of Child Safety has concluded that the evidence supports that an incident of abuse or neglect occurred based upon a probable cause standard" (see DCS substantiation guidelines for further detail).

Exhibit 10. Percent of Families Showing No Child Abuse and Neglect Incidences



Results of a Qualitative Study on Family Engagement and Retention

As part of the annual Healthy Families Arizona program evaluation, LeCroy & Milligan Associates conducted a study in fall 2018 to examine factors leading to successful engagement and possible factors leading to attrition within the Healthy Families Arizona program. The overall goal of the study was to explore strategies and techniques used by Healthy Families Arizona program staff to improve engagement and retention. To complete this study, LeCroy & Milligan Associates conducted a series of focus groups and interviews with program staff from various Healthy Families Arizona sites. The full report was submitted to Central Administration in January 2019, included here is a summary of the findings.

The key questions explored through focus groups and interviews with Healthy Families program staff included:

- What specific activities do you use in the first two months of program involvement to create buy-in to the program?
- What were the signs that you noticed families were disengaging or becoming less interested in staying in the program?
- What strategies or techniques do you use for families that appear to be drifting or disengaging in the program at the 6 month and 1-year marks?
- How does father involvement affect retention of families?
- In the best of all worlds what best practices would you recommend to help retention?

Between October 2018 and December 2018, LeCroy & Milligan Associates conducted 4 focus groups and 18 interviews with Family Support Specialists (FSS) and Family Assessment Workers (FAW) of Healthy Families Arizona. One of four focus groups was conducted in person in Pima County, and the other three focus groups were conducted virtually, through a video conferencing program. Individual interviews were completed via phone to increase participation through flexible scheduling. A total of 35 program staff members (approximately 58% FSS, 11% FAW, 20% dual role [FSS/FAW] and 11% supervisors) participated in the study. The average length of employment among participants was 5.9 years. Thirteen participants worked in rural communities, while the remaining 22 participants worked in urban communities, in and surrounding Phoenix and Tucson. The views of approximately 15% of all Healthy Families Arizona home visitors from urban and rural sites were represented, and these findings may not fully tap the wisdom and experience of home visitors in all sites. Recruiting and retaining families in

the program pose unique challenges and program staff are experimenting with many strategies to determine what is most effective.

Strategies and Techniques to Help Engage and Retain Families

Program staff demonstrate a keen range of skills and strategies that help them recognize the needs of their families. These strategies align with a person-centered, strength-based approach that highlights the individual family's needs.

Strategies and Techniques Identified by Staff		
Techniques	**Number of Responses**	**Percentages**
Warm Handoff	27	77%
Careful selection of curriculum and development activities within the first four home visits	27	77%
Home visitors set clear program expectations by promoting consistency with visits	27	77%
Creative Outreach	27	77%
Father Involvement	19	54%
Reflective Listening	18	51%
Flexibility in service intensity within standards	14	40%
Beginning with open mind	13	37%
Celebrating the transition of levels	13	37%
Flexibility hours including evening and weekend	12	34%
Social/Meet-up Groups	4	11%

Staff Expressed Needs to Improve Family Retention

Program staff shared their insights into what they felt would help retain families in the Healthy Families Program. Program staff discussed the need for additional resources, trainings as well as improved caseload management strategies. The table below summarizes all the staff's specific expressed needs.

Staff Expressed Needs to Improve Family Retention		
Needs	**Number of Responses**	**Percentages**
Caseload Management	14	40%
Materials and concrete resources	14	40%
Stronger relationships with community resources and support services	13	37%
Cultural Competency	11	31%
Additional Training	6	17%
Specific Curriculum	5	14%
Reflective Supervision	3	8%
Satisfaction Surveys	2	5%

Conclusions and Recommendations

The commitment, creativity and passion among Healthy Families Arizona program staff have contributed to their ongoing success providing high quality, consistent home visitation services that help families achieve their goals of raising healthy children. This focus group/interview study revealed that HFAz is also a learning organization that examines practices, shares new ideas for working with families, and seeks to make continual program improvements to better serve families. While home visitors are uniquely positioned to work with families to help families identify needs and achieve goals, their job is complex and difficult. Keeping families engaged and connected over time is challenging.

The strategies and techniques that Family Support Specialists and Family Assessment Workers are currently using in HFAz reflect many of the practices known to be effective or recommended by other organizations and in the literature. For example, in an extensive review of literature related to retention in home visitation, Tirilis, et al (2018), identified 5 key messages critical to engagement and retention:

- Both program design and staff approaches must be considered
- To increase engagement, employ multiple ways for families to enter the program
- Ensure quick response at intake, frequent and consistent contact
- Utilize flexible scheduling, promote strong community resource connections, build workforce capacity
- Use family-centered and solution-focused practices, follow-up regularly, be culturally responsive, and non-stigmatizing.

Recommendations from this study are derived from the needs identified by home visitors to improve engagement and retention, along with best practice strategies identified in the literature. A successful roadmap for improvements in engagement and retention across HFAz will likely include building alignment throughout all parts of the system, promoting innovation and continuous improvement, using evidence-based approaches, and regularly evaluating progress in engagement and retention.

Therefore, service considerations and practice suggestions are organized into thematic areas with approaches that might be implemented at the HFAz *system level*, at the *program site level*, and in the *professional work of individual Family Support Specialists and Family Assessment Workers*.

Provide targeted staff training and supervision		
System Level	**Program Site Level**	**FSS/FAW practice level**
Provide guidance and leadership in supporting the most critical training that will impact retention, including: ● Working with families who experience trauma, substance abuse, mental health, developmental delays ● Specific methods of engaging teen parents ● Motivational interviewing skills ● Specific approaches to building worker-family alliance, with possible focus on culturally appropriate practice ● Methods and practices to engage fathers in developmental activities	Provide individual/group supervision and training that addresses: ● How to develop strong connections in the first 4-6 visits ● Managing the assessment process and paperwork demands while still attending to relationship development ● Facilitating the sharing of best practices and case study across all team members (FAW and FSS) and HFAz sites. ● Focusing on the critical junctures where families are at risk of disengaging: upon completion of SENSE program or DCS involvement, and at the 6 and 12 month marks.	● Identify and focus on the areas of learning that they feel will most improve their practice, especially with early career home visitors. ● Participate in on-line and in-person training events ● Help managers and supervisors prioritize the specific training needs in each unique team.

Build strong community collaboration and resource connections		
System Level	**Program Site Level**	**FSS/FAW practice level**
● Continue to explore partnerships at the state and local level to bring more coordination and resources to communities. ● Help to allay stigmatization felt by some families by carefully "branding" HFAz as separate from DCS or "government".	● Improve communication among HFAz sites to share resource ideas ● Ensure that community resource and referral lists are accurate and up to date. Train in the use of internet searches for resources. ● Create connections with trusted community organizations that can act as "ambassadors" to encourage entry and retention in the program. ● Continued focus on employment resources was recommended by FSS.	● Teach families specific skills in searching for resources and ideas on the internet. ● Walk through resource lists with the family to identify best choices for their specific needs. ● Provide extra support to achieve "warm handoffs" with community agencies to which you refer families. ● Coach families in the skills of perseverance by suggesting new resources until the need is met.
Provide concrete resources and supports for families, geared to their unique traditions and family structure		
System Level	**Program Site Level**	**FSS/FAW practice level**
● Seek/provide specific funding to support supplemental materials that can be regularly given to families, e.g. transportation vouchers, baby and craft supplies, books, and other items that are real incentives for participation.	● Continue to develop creative ways to provide regular (weekly, monthly) and consistent supplies and supportive resources to families. ● Continue to develop partnerships in communities to support concrete needs, e.g. diapers, books, food, bus passes	● Focus directly on specific requests or needs unique to each family to demonstrate empathy, attentiveness and cultural sensitivity. ● Even if very small gift or resource, deliver them frequently and consistently. ● Help families with accessing job fairs, completing employment applications, applying to school etc. Plan for creative ways to sustain involvement during this process.

Increase effective use of assessment instruments for family discussion		
System Level	**Program Site Level**	**FSS/FAW practice level**
● Provide training in using assessment instruments more effectively in daily practice with families so that workers and families see greater value. ● Examine administration requirements for different assessments and paperwork. Consider policies allowing more flexibility in completion of initial paperwork to allow for better relationship building during early engagement.	● Utilize assessment results (e.g. HFPI results) in supervision discussions about critical needs and family strengths that are revealed in the survey. ● Demonstrate how to use data for data-driven practice. Integrate data into team meetings, especially at the critical junctures of 4th home visit, 6 months, 12 months. ● Encourage evidence-based, data driven practice to be a driving value in daily practice.	● Carefully plan when and how to administer instrumentation. Practice ways of discussing results and using data for family goal setting. ● Discuss with supervisor what data collection modifications can be made to insure relationship development is priority. ● Use creative ways to negotiate the completion of paperwork with families, e.g. pair it with a fun family activity.
Use flexible and creative program staffing and scheduling to meet family needs, and engage fathers/males whenever possible		
System Level	**Program Site Level**	**FSS/FAW practice level**
● Consider use of meet-up groups and socials as viable way to meet home visit or contact billing point requirements.	● Plan for more teamwork between FAW and FSS to assure the warm handoffs. ● Explore and experiment with flexible scheduling and staffing to attain more nights and weekend visit options. ● Support development of meet up groups and socials; partner with other community organizations.	● Ask for supervisor support in reaching out to disengaging families and in enabling warm hand offs. ● Recognize and plan for the special and different impact of father/male interaction with the child. Use creative scheduling and appealing activities. ● Engage multi-generational families in creating fun and meaningful family activities during the home visit.

Participant Satisfaction Ratings in 2019

The Healthy Families Arizona participant satisfaction survey provides valuable information for program staff and an opportunity for participants to reflect on their experiences in the program. If participants are satisfied with the program and the work of the home visitor, they are more likely to benefit from the program. As with past survey results, overall parents / caregivers report very positive experiences with the program – especially regarding their relationships with their home visitor.

For this year, 2019, the sampling strategy began with receiving a count of families currently served from all program sites in July 2019. Unlike previous years where the questionnaires were printed and provided to the families to complete and mail back, an online version of the survey was used. Respondents completed the online questionnaire through a unique link to the survey platform by selecting their home visitor by name. The survey was formatted to work on a phone as well as a computer. Respondents could complete the survey in Spanish or English. This new approach to data collection ended by the beginning of September 2019.

Exhibit 31 – Final Parent Satisfaction Survey Sample for 2019

County / Agency	Total Families 2019	Completed Surveys for Use in Study	Percent Response Rate by County/Agency
Apache Navajo*	19	2	10.5%
Cochise/Santa Cruz	173	28	16.2%
Coconino	74	30	40.5%
Graham/Greenlee	93	42	45.2%
Maricopa	1,281	462	36.1%
Mohave	138	57	41.3%
Pima	423	177	41.8%
Pinal	105	32	30.5%
Yavapai - Prescott	74	26	35.1%
Yavapai - Verde Valley	36	27	75.0%
Yuma	181	74	40.9%
TOTALS	2,597	957	37.0%

*Note: Apache Navajo site information is NOT reported in any site specific reports due to few responses.

Demographics and Results by Question (N=957)

Exhibit 32 Participant Demographics

Please select your Race (n=867):		
	African American	4%
	Native American	4%
	Asian	2%
	Native Hawaiian/Pacific Islander	≤ 1%
	White	52%
	2 or more Races	7%
	Other	31%
Please select your Ethnicity (n=913):		
	Hispanic	64%
	Non-Hispanic	36%
Please select your Age (n=926):		
	Less than 17 Years Old	2%
	18-29 Years Old	50%
	30-49 Years Old	47%
	50-64 Years Old	≤ 1%
	65+ Years Old	≤ 1%

How long have you worked with a home visitor from Healthy Families? (n=947)

- Less than Six Months = 23%
- Six Months to a Year = 26%
- One Year or More = 51%

In the last three months, about how many times did you have contact with your home visitor? (Contacts include; a phone call, a home visit, a visit at the offices of the home visitor). (n=845)

- Average (mean) number of contacts in past three months = 10.97; with a SD of 6.72.
- Average (median) number of contacts in past three months = 10.00.

How often has your home visitor cancelled a scheduled visit with you? (n=947)

- Never / Sometimes = 76%
- Usually / Always = 24%

How often have you had to cancel a home visit? (n=948)

- Never / Sometimes = 98%
- Usually / Always = 2%

Does your home visitor spend enough time with you? (n=948)

- Never / Sometimes = 24%
- Usually / Always = 76%

Does your home visitor provide you any materials such as; educational handouts, videos, etc.? (n=945)

- Yes = 98% / No = 2%

Does your home visitor provide materials that represent your race, language, and ethnicity? (n=949)

- Yes = 95% / No = 5%

Were the materials helpful to you? (n=948)

- Yes = 98% / No = 2%

Has the home visitor provided you or a family member with any referrals or contacts for other services such as the food bank, diaper bank, or counseling? (n=948)

- Yes = 93% / No = 7%

How often did your home visitor or someone from the home visitor's agency follow up with you to see if you were able to use the referral? (n=863)

- Never / Sometimes = 11%
- Usually / Always = 89%

How often does your home visitor talk with you about parenting your baby? (n=896)

- Never / Sometimes = 8%
- About Half the Time / Most Visits = 92%

How often does your home visitor bring an activity for you to do with your child? (n=923)

- Never / Sometimes = 8%
- About Half the Time / Most Visits = 92%

How often do you and your home visitor talk about goals that you and your family want to work toward? (n=923)

- Never / Sometimes = 6%
- About Half the Time / Most Visits = 94%

Has the home visiting support been as helpful as you thought it should be? (n=924)

- Yes – Definitely / Most of the Time = 98%
- No – Not Really / Occasionally = 2%

How often did the home visitor treat you with courtesy and respect? (n=925)

- Never / Sometimes = 1%
- Usually / Always = 99%

How often did your home visitor explain things in a way that was easy for you to understand? (n=924)

- Never / Sometimes = ≤ 1%
- Usually / Always = 99%

How often did your home visitor seem to know the most recent, most important information about your family? (n=921)

- Sometimes / More or Less = ≤ 1%
- Usually / Always = 99%

Does your home visitor respect and understand the choices you make for your children? (n=924)

- Yes – Definitely / Usually = 99%
- No – Not Really / More or Less = ≤ 1%

Do you feel more confident that you can do a good job of raising your child because you were a part of Healthy Families? (n=907)

- Yes – Definitely / Pretty Much = 98%
- No – Not Really / Definitely Not = 2%

Please rate how much the Healthy Families program has improved your life in each area below:

	A LOT / SOME	A LITTLE / NONE
My ability to solve problems (n=924)	95%	5%
More patience with my child's behavior (n=919)	95%	5%
My ability to control my temper (n=916)	90%	10%
My ability to find community resources (n=915)	96%	4%
My support system (n=910)	96%	4%
My understanding of child development (n=916)	98%	2%
My appreciation of my child (n=913)	95%	5%
My relationship with my family (n=914)	93%	7%
My relationship with my partner (n=909)	85%	15%

Choose a number from 1 to 10, where 1 is the worst home visitor possible and 10 is the best home visitor possible, what number would you use to rate your current home visitor? (n=874)

- Average (mean) Rating = 9.83 with a SD = .538

Please tell us what would make Healthy Families a better program for you…

Respondents were provided an opportunity to write in their ideas / comments as to how the program could work better for them. The overwhelming majority of the comments were very positive about the program and services that families have received from the home visiting staff. As in past survey results, most often were statements that were specific to the positive relationship parents and children have with their home visitor.

Site Visit Performance Ratings in 2019

One of the primary responsibilities of the Healthy Families Arizona Central Administration is the oversight of quality assurance and the provision of technical assistance to each of the sites around the state. This year in order to help sites prepare for re-accreditation with Healthy Families America starting in 2021, performance standards as outlined in the Healthy Families Best Practice Standards were reviewed in addition to the regular review of contractual requirements and adherence to Healthy Families Arizona Policies and Procedures. Site visits are conducted for each site at least once per year with larger sites having a subset of their teams reviewed at each visit. Each site visit includes a combination of data provided to Central Administration by local staff as well as observations and reviews by the Statewide Coordinators. Each site visit report is slightly different based on the many factors including the size of the site, the timing of the visit, and the author of the report.

Exhibits 33 and 34 show data extracted from 2019 Quality Assurance Team/Site Visit Reports. Some sites consist of more than one team. Those sites include Cochise-Santa Cruz (2 teams), Graham (2 teams), Maricopa (15 teams), Mohave (3 teams), Pima (3 teams), Pinal (3 teams), and Yuma (2 teams). For those regions, the denominator in a cell indicates the number of reports from which data were available (i.e., excludes reports that had no data for the goals or where N/A was entered). Some Site Visit Reports covered more than one team, but data were not disaggregated by team. All numbers in the fractions represent reports, not teams.

Exhibit 33 shows the number and percent of team visits within each site visit that met or exceeded the following Best Practice Standards for Case File review.

1. Case Files with FSS-1 (Screening) completed on/before 1st home visit
2. Case Files with Grievance policy completed on/before 1st home visit
3. Case Files with 1st home visit completed prenatally or within first 3 months
4. Case Files with required home visit notes completed and signed by FSS and Supervisor
5. Case Files where Level 1 was utilized for a minimum of 6 months
6. Case Files where all risk factors on Parent Survey are addressed during supervision
7. Case Files where the CHEERS Check-In has been utilized at required timeframe
8. Case Files with active goal in place for family
9. Case Files with most recent ASQ-3 completed in required timeframe
10. Case Files with completed required Edinburgh Postnatal Depression screening

Overall, the sites are doing a good job and meeting or exceeding the required Best Practice Standards. Three sites had a handful of Best Practices that did not meet these standards and response plans were put in place to be able to meet or exceed these by the next site visit.

Exhibit 33. Percentage of Reports Per Site Meeting or Exceeding Goals as Outlined in the Best Practice Standards

	Best Practice Standards – See List Above for Details % and (#Met or Exceeded/#Site Visit Reports)									
	1	2	3	4	5	6	7	8	9	10
Cochise-Santa Cruz	50% (1/2)	100% (2/2)	100% (2/2)	100% (1/1)	100% (1/1)	100% (2/2)	50% (1/2)	100% (2/2)	100% (2/2)	100% (2/2)
Coconino	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)
Graham	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)
Maricopa	100% (11/11)	100% (10/10)	100% (11/11)	100% (9/9)	100% (11/11)	100% (11/11)	100% (11/11)	100% (11/11)	100% (11/11)	100% (11/11)
Mohave	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (3/3)	100% (1/1)	100% (1/1)	100% (1/1)
Pima	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (3/3)	100% (2/2)	100% (2/2)	100% (2/2)
Pinal	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)	100% (3/3)
Prescott	0% (0/1)	0% (0/1)	0% (0/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)
Verde Valley	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)
Yuma	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)	100% (2/2)

The following are a list of Health Family Arizona Performance Measures. The performance measures have been assigned numbers to avoid lengthy column headings in Exhibit 33. In parentheses is the description of where the statewide coordinator gets the information to rate the performance measures.

1. Families in the target area shall be screened for eligibility according to Healthy Families Arizona Program standards. (Based on review of QA-12 for review period)
2. Child developmental screenings shall be completed at specified intervals per the Healthy Families Arizona Policies and Procedures Manual. (Based on 6-4.B worksheets provided as pre-site visit documentation)
3. Families shall have a Family Goal Plan completed according to Healthy Families Arizona Policies and Procedures Manual. (Based on case files reviewed at QA site visit)

4. Staff shall attend required training within the designated timeframes as specified in the Healthy Families Arizona Policies and Procedures Manual. (Based on review of training logs provided as pre-site visit documentation)
5. Required supervisory sessions occur according to Healthy Families Arizona Policies and Procedures manual. (Based on review of 11-1.B sheets provided as pre-site visit documentation for direct staff)
6. Home visits shall be completed according to Healthy Families Arizona Policies and Procedures Manual. (Based on BD-2 aggregate HV rates for all FSS for review period)
7. All files had completed Home Visit notes for each visit signed by both the FSS & Supervisor (See SOW, Performance Measure #7)

There was more variability on site compliance with meeting or exceeding the require Performance Measures this year. Several sites had response plans put in place to address these issues. The most common areas where improvement is needed is in meeting screening standards and paperwork completion.

Exhibit 34. Percentage of Site Review Reports in Which Performance Measures were Met or Exceeded – By Region (N/A indicates no data collected)

	Performance Measures – See List Above for Details (% and #Met or Exceeded/#Site Visit Reports)						
	1	2	3	4	5	6	7
Cochise-Santa Cruz	100% (2/2)	100% (2/2)	100% (2/2)	N/A	100% (2/2)	100% (2/2)	100% (2/2)
Coconino	N/A	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	N/A
Graham	100% (1/1)	N/A	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	0% (0/1)
Maricopa	N/A	100% (12/12)	100% (12/12)	100% (8/8)	100% (12/12)	100% (12/12)	100% (12/12)
Mohave	50% (1/2)	100% (2/2)	50% (1/2)	100% (1/1)	100% (2/2)	100% (2/2)	100% (2/2)
Pima	N/A	100% (3/3)	67% (2/3)	100% (1/1)	100% (3/3)	67% (2/3)	100% (3/3)
Pinal	0% (0/1)	100% (1/1)	100% (1/1)	100% (1/1)	0% (0/1)	100% (1/1)	0% (0/1)
Prescott	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)
Verde Valley	100% (1/1)	0% (0/1)	0% (0/1)	100% (1/1)	100% (1/1)	100% (1/1)	100% (1/1)
Yuma	0% (0/1)	100% (1/1)	100% (1/1)	N/A	100% (1/1)	100% (1/1)	100% (1/1)

Home Visiting Integrated Data System - ETO Transition in 2019

In 2017, work was started to develop a centralized data system for the majority of home visiting programs in Arizona. This would allow for combined analysis statewide across programs on the effectiveness of home visitation. DHS through the MIECHV Program had been using a Social Solutions Global software system known as ETO which stands for Efforts to Outcomes[15] since 2015. As such, a decision was made that the ETO license would be expanded to include all of Healthy Families Arizona sites instead of just those funded by MIECHV. FTF provided some of the initial expansion funding for this project as they were interested in having a single data collection system in place prior to the start of their new contracts with agencies effective July 1, 2018.

The following sections illustrate the kinds of difficulties that have occurred due to transition to this new data system.

Revised Timelines for ETO Transition

In order to align the start of ETO with the new FTF funding contracts, an intense timeline for bringing the new expanded data system online was put in place. This included several components, not the least of which was the creation of new data collection forms and protocols to meet the needs of all Healthy Families Arizona funders while retaining the necessary components to meet accreditation standards – as mentioned above. From January through July 2018 intensive, lengthy work sessions were held between FTF, DHS, Healthy Families Arizona Central Administration, and LeCroy & Milligan Associates to discuss, refine, and finalize the standardized data collection forms for Healthy Families Arizona. The work product from these sessions was then provided to data base designers at Social Solutions Global / ETO in order to build the data system. There were significant challenges in the communications and decision-making with Social Solutions Global / ETO as there was turn-over with the programmers assigned to this work.

Significant additional factors heightening the challenges to this process was that the timeline was very aggressive and the MIECHV / DHS data collection system was already in place and in use. This meant that some of the necessary data elements were already included in the ETO data system. This included some demographic elements and a few of the data collection tools like the Ages and Stages Questionnaire (ASQ-3). So, not only were

[15] See: https://www.socialsolutions.com/software/eto/

new components being developed and tested – it was being done in the context of a current system often using the same forms or ways for data to be entered into the system. This compounded opportunities for confusion and need for re-work.

The original "go-live" date (the date at which the system becomes usable for staff to enter data) was set for July 2018, but due to the large amount of details that needed to be worked out this date was pushed back to August 2018 for MIECHV and FTF funded teams with the additional teams funded by DCS with a planned "go-live" date of January 2019. This was to accommodate both the development of the necessary forms in ETO as well as the data migration into ETO of historical data. It was decided that only families that were currently active as of July 1, 2018 would be migrated into ETO. The January 2019 "go-live" date was pushed again due to several issues, so that for the remaining Healthy Families Arizona teams the date was pushed to April 2019. This resulted in a four-month delay that severely impacted the ability to collect and analyze data for evaluation reporting in 2019.

New Data Collection Forms and Protocols

Healthy Families Arizona is a statewide home visitation program that receives funding from multiple sources. FTF provides funding for some Healthy Families Arizona program sites and requires additional data elements beyond what is typically collected to meet the evaluation and credentialing needs of Healthy Families Arizona. Healthy Families Arizona program sites that receive funding through MIECHV also have had additional data requirements due to the federal reporting requirements of that program. As such, it was agreed by all funders and DCS Central Administration Healthy Families Arizona staff that a common set of data collection tools needed to be designed to accommodate all requirements.

This common set of data collection tools required collaboration and compromise between the agencies to determine the items that were necessary versus the ones that were just nice to have. Originally there were 15 primary data collection forms for families including the initial screening and enrollment forms as well as the ongoing follow-up data collection and other assessment tools. The combined data collection forms meeting the needs of all funders increased this to 29, although 3 of those forms are only required for sites receiving FTF funding. Data in ETO is stored by "Target Child" where the primary child receiving services is designated as the primary child and parent information and subsequent children information are attached to that record. For cases where there are twins or triplets, one child is designated as the Target Child (typically the first born) and the other as Subsequent Children. The new data collection forms reflect this by collecting the Target Child ID number on each form in order to facilitate ease of finding them correctly in ETO.

Exceptions often had to be made in how forms were finally established in ETO. For example, a form called the ASQ-3 has different questions at each time point that it is given based on the expected development of the child. As such, rather than create multiple versions of the ASQ-3 in ETO for each time point a more generic set of variables were created for staff to enter the scores for each question and sub-domain. While this has made the data system smaller and improved the time it takes to load the data, it has caused some problems for staff trying to figure out how to enter the data into ETO directly from the ASQ-3 forms in a reliable manner.

In order to explain the new data collection forms to all sites, multiple methods were used to share information. A new online repository was created by LeCroy & Milligan Associates on Citrix ShareFile to ensure that all sites had the most up to date versions of forms. LeCroy & Milligan Associates also created a Healthy Families User Guide for forms and data collection that outlines the schedule for data collection of each form, the elements within, and a description of how to address each element. This User Guide was placed on the ShareFile, shared with Supervisors at the Quarterly Supervisor Meetings, and handed out to sites when they received training on how to use ETO.

The impact of almost doubling the amount of data collection forms in an effort to have a consistent, common set of measures for all three funders of Healthy Families Arizona certainly added to the complexity and additional level of effort necessary to implement the new data system.

Time for Training and Ongoing Support for Program Staff

In addition to the current User Guide for Healthy Families Arizona, two additional guides had to be developed to support the transition into ETO. An ETO User Guide and a Supervisor Supplement. MIECHV provided the original Supervisor Supplement as a large portion of this pertained directly to running MIECHV specific reports. Later versions of the Supervisor Supplement included additional information on the specific tasks that Supervisors are responsible for in ETO such as case load assignment and funding source assignment.

Multiple trainings were held to train Healthy Families Arizona staff on how to use ETO. Trainings were held primarily in Phoenix and Tucson as staff required a computer to be able to practice logging in to the system and learning to enter data. The trainings for MIECHV and FTF funded teams occurred in August and September 2018. These teams were then responsible for entering all data from August 1, 2018 onwards. The trainings for DCS funded teams occurred this year in April and May 2019 and teams were responsible for entering all data from March 2019 onwards. Additional video-conference trainings and

one-on-one trainings occurred in June and July 2019 for teams that had missed the prior trainings and to accommodate some new supervisors.

Problems with Data Migration

The data migration process involves transferring historical program records into the new ETO data system. This included historical data for all families actively receiving services as of July 1, 2018. LeCroy & Milligan Associates prepared the data taken from their original database and modified it to work with ETO. This required the conversion of variables that had previously been saved as numbers to be converted to the appropriate text formats for ETO. Also, the response options to several variables had to be modified due to the new data collection forms. Therefore, the original responses were either converted to match the new option or were recoded as "other" when an appropriate match no longer existed. This change in both the format and the response options led to a large amount of missing data when historical data was uploaded or migrated into the new system. Each case of missing data had to be investigated by reviewing the historical record to double-check why the data was labelled as missing in the new system.

The data migration occurred in phases with the initial upload occurring in August 2018 for families that were funded through FTF. There were several lessons learned through the first data migration. There were issues with duplication where children with similar names were merged together automatically by the system despite being in different locations. This required these records to be backed out of the system and re-uploaded, although a few cases were missed and had to be corrected by hand. Several additional records were found not to have uploaded into the system due to differences in capitalization for children which were previously in the data system under MIECHV funding.

One issue that did not come to light until report building began in earnest in mid-2019 was that several of the forms were set up in such a way as to inherit the identification information of the record such as the child case name number and name when data is entered into the form. However, data that was migrated into the system does not inherit this information. This means that when reports are built to count what a child has completed, these records are not counted as the identification information is not stored in the record. A method to correct the way that reports are constructed within ETO are still not finalized as of the time of this report.

The data migration for DCS funded families began in December 2018 and concluded in March 2019. Changes were made to the way that ETO conducts client searches to avoid data entry duplication. This was done to try to minimize the merge errors which was partly successful in that the number of merge errors was reduced to less than 50 records.

However, part way through the data migration process in late January 2019 an error was found for one measure, the ASQ-3 developmental screen, that indicated that response options no longer matched the original data. A hold was put on data migration as well as report building and "go-live" for DCS was postponed until this situation was resolved. Data migration began again in March 2019 and was completed prior to "go-live" in April 2019.

For Healthy Families Arizona evaluation needs, it was understood that all MIECHV families were already in the data system and did not need to be migrated in during this December 2018 to March 2019 period. However, we discovered during our data cleaning that while the families were entered, several forms were not in ETO at the earlier time period of the MIECHV data migration and needed to be added into the current data migration process as well. These additional records were uploaded into ETO in March 2019.

Additional data migration issues arose with how the data system was labelling the types of children served. For families with twins, triplets, or children born after the Target Child[16] while still receiving services, data uploads with the information for the Subsequent Children did not always go smoothly. Due to issues with identification information not populating properly in uploaded data, several of the child specific forms were attributed to the wrong child. The data migration protocol placed the uploaded forms on the most recent child dashboard (a main form that allows sub-forms to be attached to it) which often belonged to the Subsequent Child. There was no easy solution to this coming from ETO database staff, so LeCroy & Milligan Associates staff then had to work one-to-one with individual teams to re-enter the data into the correct dashboards when identified. This problem is an ongoing concern as it is likely that not all of these errors were noted by program staff and some may still remain in the data system.

To make a long story short, data migration was extremely time consuming for LeCroy & Milligan Associates as well as the program sites due to numerous errors in the upload or migration processes. For this report, all detectable data errors have been corrected in ETO, but for some families that closed shortly after migration, these errors may not have been noticed and may still remain uncorrected. Any future data migration into ETO should not occur until a more efficient process can be set up for program staff to better examine the data for accuracy before data migration and test for quality after migration occurs.

[16] "Target Child" references the child or case that is used originally in the data base for a family. "Subsequent Children" are those children in that family who are noted after the original entry for the "Target Child".

Program Impact

Any transition to a new data system is difficult. However, Healthy Families Arizona not only transitioned into a new data system, they did a massive overhaul of the data collection forms at the same time. For program staff and teams this resulted in:

- Time for staff to learn new forms,
- Time for staff to learn the ETO software,
- A negative impact on the number of families on a caseload for home visitors when they are also responsible for data entry into ETO as well as resolving data errors,
- Expense of managing changing versions of forms, printing new forms and recycling already printed copies of the out-of-date forms,
- Additional time for data entry which previously had been handled by LeCroy & Milligan Associates, and
- An increase in the responsibilities of Supervisors to handle new tasks within ETO.

The additional data collection was burdensome to both families and staff and was mentioned in both staff and family satisfaction surveys. Anecdotally staff and supervisors stated that families were put off by the amount of paperwork being required within the first few weeks of starting the program. Of note, while not investigated in depth, there was nearly a triple percentage increase in new families that terminated services within the first three months of 2019 (17% in 2019 vs 6% in 2018).

As a reaction to this Central Administration met with the Program Managers in July 2019 to discuss options to address the growing concerns. As a result of this meeting, Central Administration discussed options with FTF and MIECHV stakeholders and got agreement that starting in FY 2020 (10/1/2019) a new data collection protocol would be put in place where no data collection forms are brought to the family after the initial Intake paperwork for the first two months. This additional time for home visitors to build a relationship with the family prior to introducing additional data collection will hopefully foster greater family engagement and retention in the program. The effectiveness of this will be evaluated and reported on in next year's evaluation report.

Logistically, ETO has created several challenges for sites. For some teams, they have hired a separate data entry specialist to enter the data into ETO. This is helpful to the home visitors as it reduces their time burden in ETO, however not all data entry staff are as familiar with the Healthy Families Arizona program and misunderstandings can lead to data entry errors. For teams that do not have dedicated data entry staff, they have had to adjust their schedules to account for the additional time it takes to enter data into ETO that was not

previously part of their schedule. Data entry into ETO requires a stable internet connection and several of the more rural sites have had difficulties with the system "timing them out" prior to the completion of entering a form. This then requires them to start over and re-enter the data.

Additional challenges with data in ETO are due to errors within the data system itself. Changes that were made to older forms already in ETO prior to the statewide transition occasionally changed values to this older data. This then affected data to any family that was at one point in a team funded by MIECHV. For example, the ASQ-3 data was the first indication of this when it was learned that the version of the ASQ-3 given as well as the outcome had shifted in older records. This was discovered in January 2019 and all data entry was halted in the system for a week while the extent of the error was determined. Data entry was able to resume once it was realized that this appeared to only effect data originally entered prior to July 2018. This data was fixed by Social Solutions Global through an additional data upload in January 2019. Additional missing data was discovered when MIECHV specific reports were run in April 2019. It was discovered that one of the forms had a logic error that was making five questions occasionally not appear for data entry. The logic error was resolved in October 2019, however the missing information from these questions has not been re-entered yet. Recently, LeCroy & Milligan Associates evaluation staff have identified an additional error regarding reasons for dismissal for families terminated in 2015 through 2017. Social Solutions Global is still working on this error and a correction will occur by April of 2020.

The greatest impact of the transition to ETO, aside from the additional time burden on sites, is the time it is taking to access accurate reports out of the system. For example, the initial errors with the ASQ-3 mentioned above which were found in January 2019 during a demonstration of the Quarterly Report showed that only 30% of families had received one. Since the sites keep a separate log detailing the ASQ-3 completion and prior history, it was obvious that there was an error. As a result of this obvious problem, report building was halted during January and February of 2019 while data was corrected and options were discussed about how to handle the possibility of missing or incorrect data. Once these decisions were addressed report building began again in March 2019, however at this point there had been (again) staffing changes at Social Solutions Global / ETO which led to new staff taking over the report building. Several of the previously partially built reports were started over by new staff with the expectation that all already allocated reports would be completed by June 2019. However, due to delays the expected deadlines were moved to July and August 2019. In July 2019 an additional delay was announced when Healthy Families Arizona was informed that all of the money allocated for report building for the year had been expended by Social Solutions Global and that work would cease until the start of the new contract year on October 1, 2019. This delay in reporting, these problems

with getting accurate reports from the system, has meant that Arizona is currently out of compliance as it relates to Healthy Families Arizona program accreditation given the inability now to regularly review programmatic data. LeCroy & Milligan Associates is working with Social Solutions Global/ETO to resolve these issues with the reports and revise them for projected use by January 2020.

The impact on evaluation and programmatic review has been significant. LeCroy & Milligan Associates was unable to run reports in ETO necessary for annual reporting. As such, full data files were downloaded from ETO for cleaning and analysis by hand. Due to server-side errors and time-outs, the process of downloading all of the various data files was extremely time consuming. Often requiring work in the evenings and weekends to try and avoid errors associated with system time-outs. Often it took 3 or 4 tries before the data pull was successful. After the data files were downloaded, they needed to be cleaned in a check for data quality and this process would uncover additional issues with incomplete data downloads. For example, over 500 records were found as "missing" enrollment information and had to be "fixed" by LeCroy & Milligan Associates evaluation staff by comparing spreadsheets one by one to identify and revise the errors.

In addition to the information errors related to data migration and reporting in ETO, sites who are now entering their own data into the system are also contributing to the errors. Some errors are simple typos where digits are reversed or dates are off, but others include not properly enrolling clients, or not entering any additional data for them. Due to these errors in data entry at the program site, during data cleaning LeCroy & Milligan Associates had nearly 600 records that did not match between what was reported in ETO and what sites reported on their monthly billing forms. Data cleaning for this report started in early October 2019 and took nearly 2 months of back and forth between various data sources to resolve the differences.

Overall, each Healthy Families Arizona program site has experienced the transition differently and additional follow up with sites will occur in the next year as staff have had more experience with the system. It will be critical in preparing for Healthy Families Arizona site re-accreditation that improvements to data quality be a significant focus for Program sites and Central Administration.

ETO Transition for Yavapai County – Prescott Team

In August 2019, LeCroy & Milligan Associates conducted a focus group with the Healthy Families Arizona program site in Prescott, Yavapai County. The reason for the focus group was to learn more about their experiences with the transition to using ETO and what was working for them and what they would like to see improved. This site was part of the April

2019 roll-out of ETO and had been using ETO for approximately four months at the time of the focus group. The Prescott site is unique in that they made the decision prior to transitioning into ETO to go as paperless as possible with the new forms and data system. This has had both challenges and benefits to the staff.

Each home visitor on the Prescott team has a Chromebook. This allows them to enter data, case information, directly into the ETO system between home visits. The home visitors do not take laptops into the home as they don't want that to interfere with their interaction and relationship with the families. This means that they are still taking in paper versions of forms to complete with the parents such as the Edinburgh Postnatal Depression Scale, the Healthy Families Parenting Inventory, and others. The Prescott team reported that they think eliminating paper is good and that it cuts down on filing work at the end of each month as they are only keeping the HV notes and contact logs on paper in the files.

> "It doesn't make sense to us that folks would do it twice. We took the time before we went live to discuss how to do this. We have a lot of checks and balances in place so that home visit notes still get printed even though they're not near a printer when they're out in the field."

The staff appreciates the ability to type their home visit notes directly into ETO and then be able to print them out to save in the files. They do think that the current set up of having to click "No" if a reflective strategy was not used, and "Yes" if one was for each of the CHEERS reporting requirements is time consuming. CHEERS stands for Cues, Holding & Touching, Expression, Empathy, Rhythm & Reciprocity, and Smiles which are domains used to measure the quality of the relationship between parents and their children.

> "The home visit notes are super hard to do twice. It's such a big time-saver to do it directly in ETO especially with having to check NO every time you didn't do a reflective strategy."

The most common complaint was the time it takes to use ETO. This includes both slow response times from the database to review information, as well as the overall time it takes to enter the data. One complaint by the supervisor is the inability to be able to review multiple files quickly. Having to select each family and wait for their dashboard to load before selecting the specific file you want to view is time consuming. Additional complains revolved around the non-user friendly nature of some of the forms in ETO and how it's not exactly a one to one match with the printed forms. For example, there is a single data entry form in ETO for the ASQ-3, a measure of child development, for all time points. Because of this the questions are not included, it only lists the question number for each domain so it is not as easy to enter into ETO directly from the written version of the ASQ-3.

> "I think entering all of the data into ETO is easy, but it is time consuming. It takes one and a half hours to get a new enrollment in. Nothing auto-populates other than the FAW1 (*Screening form*). You re-enter things like dob and addresses in multiple places."

Overall, the additional time that Prescott spent thinking about and planning for the transition to ETO was helpful to their team along with the Chromebooks that each staff has available. Given the small size of their team and the procedures that they have in place the transition to using ETO has been helpful in reducing the amount of paperwork they have to keep track of, but has increased the amount of time it takes to record data for each family.

New Data System Transition - Summary

The transition to ETO and new data collection forms was challenging at all levels. Sites had additional staff time and expenditures related to training, data entry, and new forms. Central Administration has been limited in the ability to get data reports which were previously available easily upon request from LeCroy & Milligan Associates; as well as part of the quarterly programmatic evaluation. The statewide evaluation has been severely hampered due to the inability to produce accurate reports from ETO and having to deal with ongoing issues of data quality. All sites are now using ETO in late 2019 and with experience and familiarity, the data errors should be reduced. If progress continues as expected with Social Solution Global report building in early 2020, next year's reporting should be both easier and more complete. This will require the dedication and commitment by all Healthy Families Arizona teams to improve data quality and prepare for re-accreditation.

Conclusions and Recommendations

Healthy Families Arizona is in its 28th year of service to families. July 1, 2018 through September 30, 2019 was a period of extreme transition for Healthy Families Arizona Central Administration, program managers, supervisors, home visitors, and families. The transition to new data collection forms and a new online data entry system where sites were responsible for their own data entry added additional complexity for sites. Both staff and families expressed frustration with the increase in data collection and this appears to be reflected in a nearly 3-fold higher rate of families exiting the program within the first three months than the previous year.

A total of 4,420 families benefited from the Healthy Families Arizona program. Unfortunately, the lack of complete data available for evaluation in the ETO data system has made the review of program outcomes more difficult for this report. The recommendations for this year are strongly focused on data integrity, family retention, and preparation for re-accreditation.

A Critical Focus for 2020: Effectively Implement the Arizona Home Visiting Data System – ETO

In order to meet both the programmatic and evaluation needs of Healthy Families Arizona at the team, site, state, and federal level changes need to occur. The data quality in ETO combined with the difficulty of obtaining accurate reports directly from ETO makes it so that Healthy Families Arizona is unable to completely rely on the validity and reliability of data used to monitor services and assess program impact.

We propose several steps to improve the current situation with data integrity in ETO.

Conduct a Statewide Data Clean up in ETO

Missing data and data that is inaccurate due to errors needs to be entered or re-entered into ETO in order to have a complete set of data available for all levels of reporting. We recommend scheduling a large data clean up session in late Spring / early Summer 2020 when teams are not otherwise scheduled with site visits and training so that all staff can assist in the clean-up. This will be a large undertaking and will require the assistance of staff at multiple levels to find missing or erroneous data in paper files combined with staff to do the data entry into ETO.

Accurate Reporting in ETO

The January 2020 timeframe for establishing accurate reports from the ETO system must be met. DCS and evaluation staff will continue to work with Social Solutions Global /ETO

until reports that are reliable and accurate can be produced from the system. If Social Solutions Global/ETO is unable to provide useful reports, then another method to directly download raw data needs to be determined so that the evaluators can more quickly devise their own analyses of the data.

Dedicated Data Quality Support

It is recommended that a dedicated data quality support function be established as soon as possible. The first notification about this need was made to Healthy Families Arizona Central Administration in November 2018. LeCroy & Milligan Associates has been attempting to cover some of these functions on an ad hoc basis, but these functions are time consuming and while necessary, limit time for other program evaluation activity. The primary need is to work with sites directly to provide them with regular support on data integrity so that a system is in place to address missing and incorrect data as soon as possible. LeCroy & Milligan Associates has discussed with Central Administration staff that this data quality monitoring and training function should be a coordinated function serving all three funders of the home visiting programs. The data quality support functions include:

- Managing new user accounts
- Designing, developing and offering ongoing training for new ETO users.
- Disabling old user accounts and changing security permissions
- Making adjustments to ETO forms (known in ETO as Touchpoints) and custom-built reports to accommodate form changes
- Building new Touchpoints to accommodate new forms; ongoing.
- Building new basic reports for Healthy Families Central Administration use.
- Facilitating communication with Social Solutions on other reports and system functions that is beyond the permissions provided as the site administrator
- Providing new report queries as needed for Central Admin or site use.
- Regularly reviewing data for completeness and errors with monthly reporting to sites and Central Administration.
- Working directly with teams / sites to manage missing data and getting errors corrected. Monitor requests and actions taken, report to DCS monthly.
- Cleaning of data in the ETO system with sites and Central Administration so that credentialing and other reports will work, and the data is useable moving forward; ongoing.
- Participating in state agency level Home Visiting Data System planning and coordination meetings; provide support to workgroup to enhance implementation across all home visitation programs.

Preparations for National Re-Accreditation

Healthy Families Arizona will be going through the re-accreditation process with Healthy Families America in 2021 and 2022. In order to prepare Healthy Families Arizona for the re-accreditation process that will begin during 2021, multiple steps should be taken during 2020 in order to make the re-accreditation process as smooth as possible.

Advisory Board Participation

The Healthy Families Advisory Board plays a critical role in providing recommendations and support to Central Administration. For the re-accreditation preparations, the Advisory Board along with Central Administration leads the strategic planning revisions to provide on-going updated direction for the program as well as reviewing and helping to revise policies and procedures for both the Advisory Board and Healthy Families Arizona as a whole.

Policies and Procedures Manual Update

Healthy Families Arizona has a Policies and Procedures Manual which should be updated to reflect the changes in data collection and contracts. The implementation of new forms for data collections, the use of the ETO data system, and the change in how program measures and evaluation outcomes are reported require that the Policies and Procedures Manual be updated and revised to make sure that all sites are in adherence to statewide requirements.

Improve Data Quality in ETO

As mentioned in the recommendation on the effective implementation of ETO, data quality needs to improve in order to be able to prepare accurate and representative reports for the re-accreditation process. This includes a data cleanup of historical data, regular data quality reviews as data is newly entered into ETO, and on-going training and support on how to do accurate data entry in ETO.

Focus on Family Engagement and Retention

Healthy Families Arizona provides important support to some of Arizona's most vulnerable families through home visitation. However, there was a large increase in the percent of families that failed to engage with the program or left the program within the first three months of services. Both staff and parents have indicated on the satisfaction surveys that improvements can be made by reducing the emphasis on data collection and refocusing on providing needed support to families.

Training to Support Home Visitation Staff

Healthy Families Arizona staff indicated that additional trainings as needed in how to present the importance of data collection to families, how to share assessment results with families, and how to build strong relationships with families.

Strong Supervisor Support to Home Visitation Staff

Home visiting staff who indicated a strong working relationship with their supervisor felt more satisfaction in their work. A stronger emphasis on clinical and reflective supervision is needed rather than on the administration side of supervision. This means that there should be less focus on completing paperwork during weekly supervision. There should be more emphasis on clinical needs like developing intervention and home visit activities based upon the needs, strengths, and challenges families face. In addition, there should be a good portion of supervision that supports the home visiting staff through reflective supervision. Reflective supervision provides a safe space for staff to explore the roots of feelings about their families and their role as a home visitor. The minimization of a focus on paperwork and an emphasis on the needs of the families and the emotional response of the home visitors will help to improve the support that home visitors can provide to their families and should improve family retention.

Family Outcomes

Healthy Families Arizona home visitors provide valuable support to help mothers and fathers become the best parents they can be. This includes supporting families in choosing goals and in strengthening and improving parent-child interactions.

Family Goals

Home visitors encourage parents to choose meaningful and achievable goals for themselves, their child, and/or their family as a whole. Every family should have at least one goal that they are actively working on at all times. It is recommended that staff put an emphasis on discussing the family goals during home visits and provide support to families on reaching their goals. Home visitors and supervisors should also work to encourage families to choose new goals as they attain their goals, or revise their goals when they no longer are the best fit for the family.

Parent-Child Interactions

Healthy Families uses the CHEERS framework to observe parent-child interactions. CHEERS is an acronym for Cues, Holding, Expression, Empathy, Rhythm/Reciprocity, and Smiles. The CHEERS framework is covered in depth during Healthy Families core training. The CHEERS framework is used during the home visits to help guide the home visitor to

pay particular attention to the interactions between the parent and child. Exhibit 35 describes the CHEERS domains.

Exhibit 35. CHEERS Framework Domains

Cues	Reflects how the parent responds to behaviors that the infant/young child uses to communicate. Examples include cues that invite the parent to engage, such as eye contact, smiles and coos, and cues that ask the parent to "stop" or help, such as crying, fussing, arching the back, looking away.
Holding and Touching	Reflects the presence and quality of physical contact that the parent has with the child. The quality of physical contact can range from harsh, intrusive, or impersonal, to gentle, caring and nurturing.
Expression	Reflects whether the parent expresses themselves to the child, verbally or physically (body language), and whether they are responsive to the child's efforts to communicate.
Empathy	Reflects the parent's responsivity to the child's distress. It includes whether the parent responds and how the parent responds. It also includes the parent's spontaneous efforts to encourage the child.
Rhythm & Reciprocity	Reflects how the parent supports the child's play. Parents can make play safe and available to even very young children, by encouraging engagement with their environment and by responding to their child's bid for playful engagement.
Smiles	Reflects the enjoyment the parent experiences in engaging with the child.

Home visitors use this framework when they record their home visit notes. When CHEERS domains are observed they can be denoted as a strength or a concern. One issue that has been noted during the site visits by the statewide coordinators and by the supervisors is that home visitors are recording CHEERS domains where the family has strengths, but not recording ones where there are concerns. Home visitors are encouraged to be strength-based and may feel uncomfortable using the term concern. During discussions with supervisors at the statewide quarterly supervisor meetings, it was suggested that the term concern be replaced with something more strength-based such as "opportunity for growth" or "emerging". It is recommended that a strength-based term be chosen, and this change be made on the home visit forms. Also, supervisors should encourage home visitors during weekly supervision to focus on areas of growth for the family so that the home visit notes reflect the changes over time in parent-child interaction.

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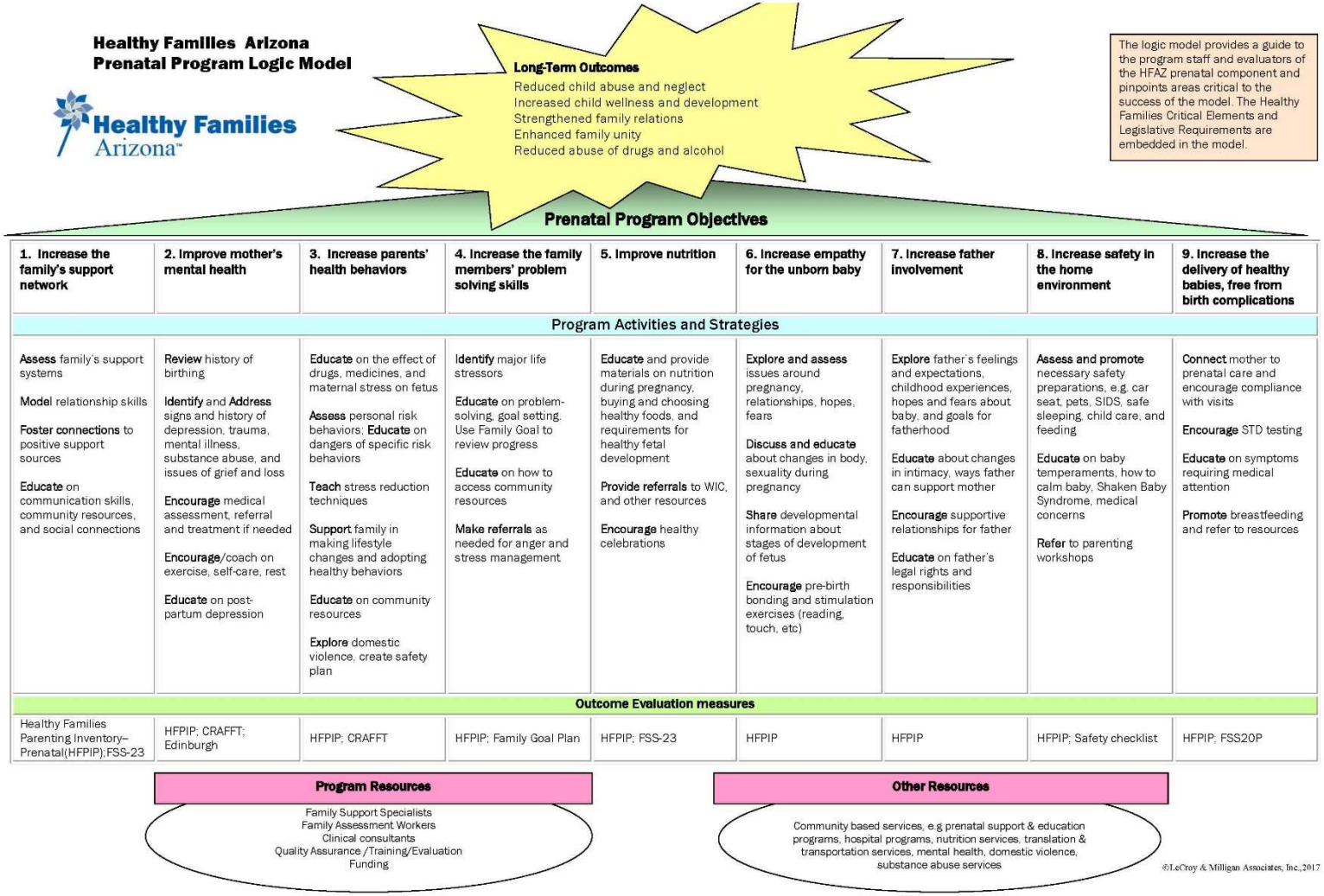
Appendix B. Healthy Families Arizona Prenatal Logic Model



Appendix C. Healthy Families Arizona Postnatal Logic Model