Tennessee Home Visiting Programs Annual Report

July 1, 2010 - June 30, 2011



Tennessee Department of Health Maternal and Child Health Section 425 Fifth Avenue North 4th Floor, Cordell Hull Building Nashville, TN 37243

ANNUAL HOME VISITING REPORT FOR FISCAL YEAR 2011

Table of Contents

Memorandum from John J. Dreyzehner, MD, MPH, FACOEM Commissioner of the Tennessee Department of Health	3
Memorandum from Linda O'Neal, Executive Director of the TN Commission on Children and Youth	4
Background	5
Introduction to Home Visiting Programs	5
Home Visiting Services Administered by the Tennessee Department of Health	6
Summary Tables of Home Visiting Programs and Common Outcome Measures	7
Strengths and Opportunities	9
Program Specific Information	3
Conclusions2	20
Appendix: Number Served by County	21



STATE OF TENNESSEE DEPARTMENT OF HEALTH CORDELL HULL BUILDING

425 5TH AVENUE NORTH NASHVILLE, TENNESSEE 37243

MEMORANDUM

To: The Honorable Bill Haslam, Governor

Chair, Senate Health and Welfare Committee

Chair, House Children and Family Affairs Committee

Chair, Senate Judiciary Committee

Chair, House Health and Human Resources Committee

From: John J. Dreyzehner, MD, MPH, FACOEM

Commissioner, Tennessee Department of Health

Date: January 1, 2012

RE: Annual Report for Home Visiting Programs

As required by Tennessee Codes Annotated 68-1-125, 37-3-703 and 68-1-2408 the **Tennessee Department of Health Annual Report – Home Visiting Programs** for July 1, 2010 – June 30, 2011 is hereby submitted. The report reflects the status of efforts to identify and expand the number of evidence-based home visiting programs throughout Tennessee.

The report includes process and outcome measures used to evaluate the quality of home visiting services offered to participating families and compares them, where applicable, to state averages and national objectives as reflected in *Healthy People 2020*, the federal document which sets national health goals and objectives every ten years. Measures from individual programs including the number of people served, the types of services provided, and the estimated rate of success in meeting specific goals and objectives are also included.

The Department collaborates annually with the Tennessee Commission on Children and Youth (TCCY) to prepare this report. Ongoing partnerships with TCCY and other interested parties have strengthened the scope and quality of home visiting services available to Tennessee children and families.

This report will also be made available via the Internet at http://health.tn.gov.



STATE OF TENNESSEE TENNESSEE COMMISSION ON CHILDREN AND YOUTH

Andrew Johnson Tower, Ninth Floor 710 James Robertson Parkway Nashville, Tennessee 37243-0800 (615) 741-2633 (FAX) 741-5956 1-800-264-0904

MEMORANDUM

TO: The Honorable Bill Haslam, Governor

The Honorable Ron Ramsey, Lieutenant Governor The Honorable Beth Harwell, Speaker of the House Members of the Tennessee General Assembly

From: Lingson Neal, Executive Director

Date: January 2012

RE: Annual Report for Home Visitation Programs

In accordance with 2008 Public Chapter 1029, codified as TCA 68-1-125, the Tennessee Commission on Children and Youth worked with the Department of Health (DOH) and others to report on the status of quality, evidence-based home visitation programs funded through DOH.

It is a critical time in our state and country for home visitation programs. In Tennessee, two of the state home visiting programs offered through the Department of Health, Child Health and Development (CHAD) and Healthy Start, received non-recurring funding for fiscal year 2011-2012. The preservation of these vital programs is essential to avoid eroding the opportunity to provide quality home visitation services in Tennessee.

Quality home visitation programs have demonstrated success in reducing child maltreatment in highrisk families, including single or young mothers, low-income households and families with lowbirth-weight infants. Child maltreatment, including abuse and/or neglect, is not only traumatic in itself and can result in state custody, it also increases the risk of adverse consequences among maltreated children, including early pregnancy, substance abuse, school failure and mental illness. Children who have been physically abused are also more likely to exhibit aggressive behavior and violence later in their lives.

Home visitation programs for high-risk families, high-risk infants and young children could be instrumental in reducing premature and low-birth-weight babies, infant mortality and child abuse, improving immunization rates, and increasing parental understanding of the developmental needs of their children. Available data report children served by these programs have better outcomes on some measures than the state as a whole. Quality home visitation programs are a sound long-term investment in the future of Tennessee.

The Commission on Children and Youth is committed to efforts to maintain and improve quality home visitation programs in Tennessee. They are a wise investment in improving outcomes for young children.

Background

This report is submitted in compliance with the statutory requirements for a status report on evidence-based home visiting (TCA 68-1-125), Healthy Start (TCA 37-3-703), and Nurse Home Visiting (TCA 68-1-2408).

TCA 68-1-125 requires the Tennessee Department of Health (TDH) to annually review and identify the research models upon which the home visiting services are based, to report on the process and outcomes of those who were served, and to identify and expand the number of evidence-based programs offered through TDH in the state. The statute further states TDH shall work in conjunction with the Tennessee Commission on Children and Youth (TCCY) and other experts to identify those programs that are evidence-based, research-based and theory-based and report such findings to the Governor and specific committees of the state legislature no later than January 1 of each year.

TCA 37-3-703 establishes the Healthy Start Pilot Program based on the national model and states that the program must be implemented in ten (10) or more counties of the state. The program focuses on improving family functioning and eliminating abuse and neglect of infants and young children in families identified as high risk.

TCA 68-1-2408 establishes the Nurse Home Visiting program based on the national evidence based model known as the Nurse Family Partnership. Home visiting nurses carry a small caseload and enroll women for service prior to the 28th week of pregnancy.

Introduction to Home Visiting Programs

Recent research clearly demonstrates that optimal infant and early childhood development, especially brain development, is critical for children to be healthy and ready for school. Home visiting services have been proven to help families with young children learn, strengthen family functioning, prevent child abuse and neglect and apply new knowledge in order for their children to have the best chance of thriving during the preschool and early school years.

In a home visiting program, trained professionals provide regular, voluntary home visits to at-risk expectant and new parents and offer guidance, risk assessment, developmental screening, and referrals to other services offered in the community. Well-designed programs improve outcomes for children and families. Economists have found that, over time, home visiting programs can return up to \$5.70¹ per taxpayer dollar invested by reducing societal costs associated with poor health and academic failure.

¹ L.A. Karoly, et al,. *Early Childhood Interventions: Proven Results: Future Promise* (Santa Monica, CA: RAND Corporation, 2005); J. Isaacs, "Cost-Effective Investments in Children," *Budgeting for National Priorities* (2007)

Home Visiting Services Administered by the Tennessee Department of Health

The Tennessee Department of Health (TDH) has successfully administered home visiting services since 1979. Since that time, several home visiting programs have been established utilizing a variety of approaches to meet the unique needs of Tennessee communities.

Currently, TDH administers home visiting services in all 95 counties through county health departments or contractual arrangements with community-based agencies. The four TDH administered home visiting programs are categorized as evidence-based, research-based or theory based.

TCA 68-1-125 defines home visiting programs as follows:

- "Evidence-based" means the program or practice is governed by a program
 manual or protocol that specifies the nature, quality and amount of service that
 constitutes the program and research using methods that meet high scientific
 standards for evaluating the effects of the programs have demonstrated with two
 or more separate client samples that the program improves client outcomes
 central to the purpose of the program.
- "Research-based" means a program or practice that has some research demonstrating effectiveness, but that does not yet meet the standard of evidence-based; and
- "Theory-based" means a program or practice that has general support among treatment providers and experts, based on experience or professional literature, may have anecdotal or case-study support, and has potential for becoming a research-based program or practice.

Tables 1 and 2 summarize key information, number served, program results and outcome measurements for home visiting programs and services administered by TDH during FY 2011 (July 1, 2010-June 30, 2011).

TABLE 1: SUMMARY OF HOME VISITING PROGRAMS/SERVICES AND NUMBERS SERVED FY 2011

Home Visiting Program/Service	Location	Program Model	Target Group(s)	Number served FY2011	Types of Service provided
Child Health and Development (CHAD)	22 counties in Northeast and East TN	Theory Based	 Teen parents under 18 Families with children under 5 years old Other parents at risk of abuse and neglect (DCS referred) Low income 	• 997 children	 Family assessment Developmental screening Nutrition assessment Referral for other services as needed Monthly home visits
Healthy Start	30 counties in Middle and West TN	Research and Evidence Based	 Prenatal women Families with children under 5 years old Low income 	• 1,148 families • 1,295 children	 Family assessment and Stress inventory Developmental screening Referral for needed services Home visits – Intensity based on needs of family
Help Us Grow Successfully (HUGS)	All 95 counties	Theory Based	 Prenatal women Families with children under 6 years old Women up to 2 yrs postpartum Families with loss of a child before age 2 No income requirements 	5,028 families5,275 children	 Family assessment Developmental assessment Referral for needed services Home visits- Intensity based on needs of family
Nurse Family Partnership (NFP)	1 pilot project in Memphis	Research and Evidence Based	 First time mothers only Low Income (defined as gross annual income under 200% of the Federal Poverty Level) Can continue service until child is 2 years old 	• 118 pregnant women	 Family assessment Developmental screening Referral for needed services Home visits – Intensity based on prenatal timing and child's age

TABLE 2: SUMMARY OF COMMON HOME VISITING OUTCOME MEASURES BY PROGRAM/SERVICE FY 2011

Outcome Measures	CHAD	Healthy Start	HUGS	Nurse Family Partnership	Tennessee Population At Large
Percent of mothers enrolled prenatally who gave birth to infants weighing 2500g (5.5 lbs) or more	85.7%	84.1%	87%	91.3%	90.8%2
Percent of infants born at full term (37 weeks or later)	100%	85.5%	87.1%	94%	86.5% ³
Percent of children with up-to-date immunizations at 24 months	87.3%	97.2%	89.7%	NA – All children are under 24 months	72.3%4
Percent of children free from child abuse and neglect	91.6%	99.4%	96.5%	100%	99.993%5

² 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics ³ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics ⁴ 2010 Immunization Status Survey of 24 month old children in Tennessee ⁵ 2011, Tennessee Department of Children's Services

Strengths and Opportunities Related to Home Visiting Services

Availability of Home Visiting Services

Collectively, approximately 7,500 children were served by TDH-administered home visiting programs and services during FY2011. Additional home visiting programs offered by community based organizations not included in this report provide a broad spectrum of services in some areas of the state to assist families.

While home visiting services are available in all 95 counties, capacity to serve the 0-5 population varies across the state. As indicated in TCCY's 2011 Resource Mapping Report, few counties serve more than 5.6% of the 0-5 population who reside in that county.⁶ It is likely that additional families could benefit from home visiting services were they more widely available.

Collaboration between Public and Private Sector Stakeholders

The recent focus on home visiting services at the state and federal level has fostered the creation of more substantive relationships between programs allowing for a dialogue about similarities and differences and how best to expand services to meet the needs of children and families. Prevent Child Abuse Tennessee (PCAT) has convened the Home Visiting Collaboration, which consists of home visiting program representatives from across the state, to discuss these opportunities and to strategize how home visiting services can best be offered and expanded to improve child health and development, reduce abuse and neglect and strengthen family functioning.

TDH actively participates in the Collaboration meetings. As these discussions continue, the partners are beginning to address issues that will improve the intake and referral system to assure that families are assessed for their needs and receive timely and appropriate home visiting services based on the identified needs. Additionally, it is important to the collaboration partners that other service needs of families are identified by staff and addressed through a robust referral and follow up system such as community-based information and referral networks.

TDH is serving as a catalyst to develop a uniform intake and referral system based on county/regional resources to assure that families receive the right service at the right time for the right purpose. TDH, in conjunction with community partners, is exploring how to develop a statewide service information and referral system for any professional to obtain accurate information and refer families for other needed support services critical to family stability and function.

⁶ Tennessee Commission on Children and Youth, 2011 Resource Map of Expenditures for Tennessee Children.

Data Collection for Program Evaluation and Continuous Quality Improvement
The Department of Health is firmly committed to collecting data to examine process and
outcome measures related to its programs, including home visiting services. The
Department has a common system (Patient Tracking Billing Management Information
System, PTBMIS) in all 95 counties that allows for consistent data collection across the
state. Over the past few years, the system has been modified to accommodate HUGS
data in order to support outcome measurement and continuous quality improvement
efforts. The data illustrated in this report are only a sample of the large quantity of data
collected by HUGS staff.

The importance of measuring program impact has grown in the last decade and is now one of the cornerstones of program implementation among home visiting programs in both the public and private sectors. By identifying and aligning common outcomes and measures, home visiting programs are using data to continuously improve and document the effectiveness of these services. This report includes the status of a few similar outcomes and measures regardless of the program implemented. For example, the two year old immunization rate is a standard outcome measurement to determine if young children are receiving regular well child checkups, an important indicator of health and well being in preschool children; therefore it is reported for cross program comparisons. Birth weight and gestational age are similar measures. However, there is wide variability in the amount and type of data collected across the various home visiting programs in Tennessee. Given the growing emphasis on data collection and utilization, there is a great opportunity for standardization of measures collected across programs. Over the next fiscal year, TDH will provide leadership to develop a set of uniform program measures and methods to collect data which will improve Tennessee's ability to evaluate effectiveness and impact of home visiting services and compare outcomes across programs.

Emphasis on Evidence-Based Services and Programs

The Department of Health is absolutely committed to the implementation of evidence-based programs, where sufficient evidence exists and where resources exist to implement such programs at a population level. TDH staff continuously reviews and modifies theory based program procedures and identifies opportunities to implement evidence-based components when available. Activities that have been implemented by TDH in order to improve and align services with evidence-based practices include the collection and measurement of key outcomes, the establishment of core competencies for all home visitation staff and the development of a continuous training system based on the core competencies to assure a set of knowledge and skills exist among both new and seasoned home visitors. The products and resources developed from these activities are projected to be available in the next fiscal year and will be extended to all home visiting programs in the state.

Maternal, Infant, and Early Childhood Home Visiting (MIECHV)

The Patient Protection and Affordable Care Act expanded Title V of the Social Security Act to establish the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program which provides funding for states to implement evidence-based home visiting practices in the most at-risk communities. In 2010, Tennessee completed a statewide Needs Assessment related to home visiting services and utilized this information to develop an initial State Plan for expansion of home visitation services. Based on the counties identified as high-risk in the Needs Assessment, a request for proposals was issued in spring 2011 to seek proposals for implementing one of three evidence-based home visiting programs in the identified counties. The evidence based models being implemented include: Healthy Families America, Parents as Teachers, and Nurse Family Partnership. Six community-based agencies were selected to begin implementing evidence based models in the following counties beginning in July 2011: Campbell (Nurse Family Partnership), Davidson (Healthy Families America), Hamilton (Parents as Teachers), Maury (Healthy Families America), Montgomery (Healthy Families America), and Shelby (Healthy Families America, Nurse Family Partnership and Parents as Teachers). As military families represented one of the priority populations in the legislation, one of the funded projects will specifically target military families living off base in Montgomery County, where Fort Campbell Military Base is located.

The MIECHV funding will provide TDH an unprecedented opportunity to identify and adopt common assessment tools, train home visiting staff on the use of these tools and design data collection instruments. The data collection system used for this program could eventually be expanded to accommodate other programs for reporting of aggregate data and to provide programs with timely reports of home visiting outcomes for ongoing quality improvement and evaluation of impact. Information about the MIECHV-funded projects will be included in the FY 2012 annual report after these projects have completed one year of implementation.

Program-Specific Information

This section contains data on the objectives for each of the home visiting programs/services administered by the Department of Health. Where possible, program-specific objectives are compared to the TN population at large and to Healthy People 2020 target objectives. Objectives vary across programs, based upon specific statutory requirements or requirements from the model developers (for evidence-based programs).

Child Health and Development Program (CHAD)

The Child Health and Development (CHAD) program, the oldest home visiting program implemented by TDH, is designed to: 1) enhance physical, social, emotional, and intellectual development of the child; 2) educate parents in positive parenting skills; and 3) prevent child abuse and neglect. The program is offered in 22 counties in Northeast and East Tennessee through local public health departments and is staffed by state employees. Funds to support this program come from the Social Services Block Grant and are provided to TDH through an interdepartmental agreement with the Department of Children's Services (DCS). CHAD was funded in FY2011 with non-recurring dollars. Without continuation of funding, the program will be eliminated in FY2012. CHAD began as a research and theory-based model based on the Demonstration and Research Center for Early Education model developed by Peabody College. Because of program changes over the years, CHAD is now primarily a theory based model for home visiting. All families can receive services from the birth of a child until the child turns 6 years of age. Prenatal home visiting services are provided for pregnant women who are less than 18 years of age.

TABLE 3: FY2011 Program Objectives—CHAD

OBJECTIVES	STATUS FY 2011	Comparison of Status to Target		
		CHAD	TN	Healthy
			Population	People 2020
			At Large	Target ⁷
100% of children are free of child abuse and neglect	91.6% of enrolled children were free of child abuse and neglect in FY 2011.	91.6% or 84 per 1000	99.993% or 7 per 1000 ⁸	99.9915% or 8.5 per 1000 ⁹
90% of 2 year olds are fully immunized	2) 87.3% of children who turned 2 during the year were up to date on immunizations.	87.3%	72.3% ¹⁰	90% ¹¹

⁷ Healthy People Targets are goals for the nation and are not indicative of current status

⁸ 2011, Tennessee Department of Children's Services

⁹ Healthy People 2020 –Injury and Violence Prevention- 38-Reduce nonfatal child maltreatment

¹⁰ 2010 Immunization Status Survey of 24 month old children in Tennessee

¹¹ Healthy People 2010 -14-22 Universally recommended vaccinations

Healthy Start

Healthy Start aims to reduce or prevent child abuse and neglect in enrolled families. Legislatively mandated by the Tennessee Childhood Development Act of 1994 (TCA 37- 3-703), the Healthy Start program is provided in 30 counties by eight community-based agencies and is staffed by employees of those agencies. Funding for Healthy Start is provided through an interdepartmental agreement with DCS from the Administration on Children, Youth and Families (ACF) Promoting Safe and Stable Families funds to prevent child abuse and neglect. Healthy Start was funded in FY2011 with non-recurring dollars. Without continuation of funding, the program will be eliminated in FY2012. Healthy Start is an evidence-based model. Families at high risk of child abuse and/or neglect as measured by the Kempe Family Stress Checklist are eligible for enrollment in the program; participation is voluntary.

TABLE 4: FY2011 Program Objectives—Healthy Start

OBJECTIVES	STATUS FY 2011	Comparison of Status to Target		
		Healthy Start	TN Population At Large	Healthy People 2020 Target
At least 95% of children are free of child abuse and neglect	99.4% of enrolled children were free of child abuse and neglect in FY 2011.	99.4% or 5.6 per 1000	99.993% or 7 per 1000 ¹²	99.9915% or 8.5 per 1000 ¹³
At least 90% of program children are up to date with immunizations by their 2 nd birthday	97.2% of children were up to date on immunizations at age 2.	97.2%	72.3% ¹⁴	90%15
At least 90% of Healthy Start program mothers will delay a subsequent pregnancy for at least 12 months after the birth of the previous child	94.2% were not pregnant one year or more after the birth of the previous child.	94.2%	59.3% ¹⁶	Comparable national target not available
At least 90% of enrolled children will receive at least one annual periodic developmental screening	100% of children received at least one developmental screening during the year in accordance with screening tool guidelines.	100%	29% ¹⁷	Comparable national target not available

¹² 2010, Tennessee Department of Children's Services

¹³ Healthy People 2020 –Injury and Violence Prevention- 38 Reduce nonfatal child maltreatment

¹⁴ 2010 Immunization Status Survey of 24 month old children in Tennessee

¹⁵ Healthy People 2010, 14-22 Universally recommended vaccinations

¹⁶ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

¹⁷ Tennessee Report from the National Survey of Children's Health, NSCH 2007

At least 85% of mothers enrolled prenatally will give birth to babies weighing 2,500 grams or more	84.1% weighed 2,500 grams or more.	84.1%	90.8% ¹⁸	92.2% ¹⁹
At least 85% of mothers enrolled prenatally will deliver their babies at term (37 weeks or later)	85.5% were born at 37 weeks or more.	85.5%	86.5% ²⁰	88.6% ²¹

In accordance with TCA 37-3-703(d)(1)(2)(3)(6), the following additional information about Healthy Start is provided for FY 2011.

TABLE 5: NUMBER OF CHILDREN/FAMILIES SERVED (FY 2011)

Facility Name	Children	Families
Center for Family DevelopmentShelbyville	81	67
Healthy Start of Clarksville	148	141
Helen Ross McNabb Center	300	255
Jackson-Madison County General Hospital	145	132
Le Bonheur Center for Children and Parents	160	148
Metro Nashville Health Department	192	164
Stephens Center	146	124
University of Tennessee at Martin	123	117
TOTAL All Sites	1,295	1,148

TABLE 6: NUMBER OF VISITS PROVIDED BY TYPE OF SERVICE CONTACTS

Facility Name	Home Visits	Other Visits ²²	Group Sessions
Center for Family DevelopmentShelbyville	1,468	132	21
Healthy Start of Clarksville	2,351	25	12
Helen Ross McNabb Center	3,956	413	321
Jackson-Madison County General Hospital	2,582	56	173
Le Bonheur Center for Children and Parents	2,409	14	10
Metro Nashville Health Department	2,357	45	5
Stephens Center	1,261	104	12
University of Tennessee at Martin	1,619	6	0
TOTAL All Sites	18,003	795	554

¹⁸ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

¹⁹ Healthy People 2020 MICH-8.1 Percent of live births are low birth weight

²⁰ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

²¹ Healthy People 2020 MICH-9.1 Percent of live births are preterm

[&]quot;Other" visits are defined as visits that take place in locations such as the health department clinic, office, or high school.

CHILDREN AT RISK FOR ABUSE OR NEGLECT PRIOR TO INITIATION OF SERVICES

The Kempe Family Stress Checklist (KFSC) is a standardized instrument used by the Healthy Start program to measure indicators of stress and elevated risk for child abuse and neglect. Families whose stress scores are at or above the recommended cutoff level of 25 points are offered enrollment in the Healthy Start program. All 1,295 (100%) of the children receiving Healthy Start services were considered at risk for abuse/neglect based on the family KFSC score prior to initiation of service.

TABLE 7: PERCENT OF CHILDREN FREE OF ABUSE/NEGLECT AND REMAINING IN HOME FOR PAST FOUR YEARS

Fiscal Year	% of children
2007	99.4%
2008	98.1%
2009	98.8%
2010	99.4%

COST BENEFITS ESTIMATE

In accordance with TCA 37-3-703(d)(4)(5), the following information is provided about the average cost of services provided by Healthy Start and the estimated cost of out-of-home placement that would have been expended on behalf of children who remain united with their families as a result of participation in Healthy Start. As shown below, participation in Healthy Start represents a more cost-effective measure for prevention of child maltreatment than foster care (savings of \$6,000 per year) or residential care (savings of \$43,000 per year).

Average Annual Cost per Child	\$2,757.00 ²³
Healthy Start Program	
Average Estimated Annual Cost per Child	\$8,803.80 ²⁴
Out of Home Placement: Foster Care	
Average Estimated Annual Cost per Child	\$46,227.25 ²⁵
Out-of-Home Placement: Residential Care	

²³ Annual cost is based on program budget of \$3,571,000 (DCS Contract to TDH of \$3,060,100 plus MCH Block Grant Funding of \$510,900) divided by 1,295 children served

²⁴ Tennessee Department of Children's Services , \$24.12 per day per child or \$8,803.80 per year

²⁵ Tennessee Department of Children's Services, \$126.65 per day per child or \$46,227.25 per year

Help Us Grow Successfully (HUGS)

The Help Us Grow (HUG) program was developed by TDH beginning in the 1990s to provide care coordination in order to optimize child health and well being and was renamed in FY 2003 to Help Us Grow Successfully (HUGS). The goals of the program are to improve pregnancy outcomes, improve maternal and child health and wellness and maintain or improve family strengths. In FY 2007, HUGS was modified to provide these services using a standardized curriculum for parenting skills. In 2008-2009, HUGS was further modified to include an electronic data collection system on all children and families enrolled in the program, including regular assessments of family wellness and child growth and development using the standardized Ages and Stages questionnaire. HUGS is TDH's only program that offers home visiting services in all counties of the state through local public health departments and is staffed by state employees. Funds to support this program come to TDH through an interdepartmental agreement with the Bureau of TennCare to provide care coordination health services to young children; improving birth outcomes and increasing the number of infants and children who are up to date with the health assessment services of Early Periodic Screening Diagnosis and Treatment (EPSDT) are a primary focus of the program. HUGS is a theory-based care coordination program which offers services (including home-visiting services) on a voluntary basis to pregnant women, postpartum women, and families with children from birth up to their 6th birthday.

TABLE 8: FY2011 Program Objectives—HUGS

OBJECTIVES	STATUS FY 2011	Comparison of Status to Target		
		HUGS	TN Population At Large	Healthy People 2020 Target
At least 90% of women enrolled prenatally will not smoke during pregnancy	77.3% of women reported that they did not smoke during pregnancy.	77.3%	82.4% ²⁶	98.6% ²⁷
At least 90% of HUGS program mothers will delay a subsequent pregnancy for at least 12 months after the birth of the previous child	Of the mothers with at least one previous birth, 94.5% had a birth interval greater than 12 months.	94.5%	59.3% ²⁸	Comparable national target not available.

16

 ²⁶ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics
 ²⁷ Healthy People 2020, MICH- 11.3 Abstaining from smoking during pregnancy

²⁸ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

At least 85% of mothers enrolled during the prenatal period will have a healthy birth measured by birth weight 2,500 grams or more	87% of babies born to HUGS participants were of a healthy weight.	87%	90.8% ²⁹	92.2% ³⁰
At least 85% of mothers enrolled during the prenatal period will have a healthy birth measured by gestational age of 37 weeks or later	87.1% were born at 37 weeks or later.	87.1%	86.5% ³¹	88.6% ³²
At least 90% of the infants and children enrolled will receive and maintain effective vaccination coverage for universally recommended vaccines among young children	89.7% of the 2 year olds were up to date on immunizations	89.7%	72.3% ³³	90% ³⁴
At least 90% of the program participants (caregivers and children) identified as needing other community services are referred within one month	91.1% of service referrals were completed within one month for identified problems.	91.1%	Tennessee state-level data not available.	Comparable national target not available
At least 90% of children are free of child abuse and neglect	96.5% of enrolled children were free of child abuse and neglect in FY 2011.	96.5% or 35.1 per 1000	99.993% or 7 per 1000 ³⁵	99.9915% or 8.5 per 1000 ³⁶
Newly enrolled mothers and children participate in Women, Infants, & Children (WIC) Program	84.3% of newly enrolled women and children participated in WIC	84.3%	51.5% ³⁷	Comparable national target not available.

 $^{^{29}}$ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics Healthy People 2020 MICH-8.1 Percent of live births are low birth weight

³¹ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

³² Healthy People 2020 MICH-9.1 Percent of live births are preterm

 $^{^{33}}$ 2010 Immunization Status Survey of 24 month old children in Tennessee

³⁴ Healthy People 2010, 14-22 Universally recommended vaccinations

 ^{35 2011,} Tennessee Department of Children's Services
 36 Healthy People 2020 – Injury and Violence Prevention- 38 Reduce nonfatal child maltreatment
 37 Tennessee Pregnancy Risk Assessment Monitoring System, 2008

Nurse Family Partnership (NFP)

TCA 68-1-2408 designates TDH as the responsible agency for establishing, monitoring and reporting on the Nurse Family Partnership pilot project funded through a state appropriation. This state law requires the replication of the national evidence-based model with the goal of expanding the program as funds become available. The goals of the Nurse Family Partnership project are to improve pregnancy outcomes, improve child health and development and improve the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find work. The project, implemented locally by Le Bonheur Children's Hospital in Memphis, began seeing families in June 2010 after staff were hired and trained. Home visiting nurses provide services to low income, first time mothers who are enrolled before 28 weeks of pregnancy through the child's second birthday. The Nurse Family Partnership program is an evidence based model.

TABLE 9: FY2011 Program Objectives—Nurse Family Partnership

OBJECTIVES	STATUS FY 2011	Comparison of Status to Target		
		Nurse Family Partnership	TN Population At Large	Healthy People 2020 Target
At least 75% of eligible women referred to the program will be enrolled	87% of the referred women were enrolled in the program.	87%	N/A	N/A
At least 90% of enrolled pregnant women have adequate prenatal care	75% received adequate prenatal care defined by Kessner Index.	75%	59.3% ³⁸	77.6% ³⁹
At least 85% of mothers enrolled during the prenatal period will have a healthy birth measured by birth weight 2,500 grams or more	91.3% of babies born to NFP participants weighed 2500 grams or greater.	91.3%	90.8% ⁴⁰	92.2% ⁴¹
At least 85% of mothers enrolled during the prenatal period will have a healthy birth measured by gestational age of 37 weeks or later	94% of babies born to NFP participants were born at 37 weeks or later.	94%	86.5% ⁴²	88.6% ⁴³

18

³⁸ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

³⁹ Healthy People 2020, MICH-10.2 Early and adequate prenatal care

⁴⁰ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

⁴¹ Healthy People 2020 MICH-8.1 Percent of live births are low birth weight

⁴² 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics

⁴³ Healthy People 2020 MICH-9.1 Percent of live births are preterm

At least 20% or greater reduction in percentage of women smoking from intake to 36 weeks of pregnancy	98% of women reported that they did not smoke during pregnancy.	98%	82.4% ⁴⁴	98.6% ⁴⁵
At least 90% completion of recommended immunizations by the time the child is two years of age	No enrolled child has attained 2 years of age to date.	N/A	72.3% ⁴⁶	90%47
At least 90% of children are free of child abuse and neglect	100% of children were free from child abuse and/ or neglect during FY 2011. 0 incidents have been reported or observed by the families receiving services.	100% or 0 per 1000	99.993% or 7 per 1000 ⁴⁸	99.9915% or 8.5 per 1000 ⁴⁹
Enrolled mothers and children participate in WIC	97% of enrolled mothers are receiving WIC.	97%	51.5% ⁵⁰	Comparable national target not available.
At least 90% of infants and children enrolled will receive age appropriate screening for developmental delays	93% of the infants who reached 4 months received their first developmental screening using the Ages And Stages Questionnaire (ASQ).	93%	29% ⁵¹	Comparable national target not available.

 ⁴⁴ 2010, Tennessee Department of Health, Office of Policy, Planning & Assessment, Division of Health Statistics
 ⁴⁵ Healthy People 2020, MICH- 11.3 Abstaining from smoking during pregnancy

⁴⁶ 2010 Immunization Status Survey of 24 month old children in Tennessee ⁴⁷ Healthy People 2010, 14-22 Universally recommended vaccinations ⁴⁸ 2011, Tennessee Department of Children's Services

⁴⁹ Healthy People 2020 –Injury and Violence Prevention- 38 Reduce nonfatal child maltreatment

⁵⁰ Tennessee Pregnancy Risk Assessment Monitoring System, 2008

⁵¹ Tennessee Report from the National Survey of Children's Health, NSCH 2007

Conclusions

Over the past three years, TDH has been able to review and strengthen its home visiting programs and relationships between partners. The goal now is to develop a strong, integrated system of care with home visiting as one of the critical services available to families at risk. Paramount to the success of this goal is the continued effort to build adequate infrastructure that supports program administration, capitalizes on technology, and is accessible across programs. This infrastructure, particularly as it relates to data collection and monitoring, will allow for more robust quality improvement and give programs the information they need to demonstrate impacts and pursue funding opportunities to support and expand their programs.

Development of information and referral services to provide immediate and accurate service information to families and staff will increase the efficiency and effectiveness of addressing identified needs outside home visiting services. Families, especially families at risk, have many needs beyond the basic care of their children. By improving the early identification and referral for child and family needs, TDH will have the best chance for impacting and improving child health and development and family functioning.

TDH has a rich history of providing high-quality services to at-risk families across the state. The Department looks forward to continued success and collaboration with other public and private partners in order to improve child health and well being and support parents in the very important work of helping their children become successful.

Appendix: Number Served by County

County	HUGS (Families served)	Healthy Start (Families Served)	CHAD (Children served)	Nurse Family Partnership (Pregnant women served)
ANDERSON	51	*	13	*
BEDFORD	92	36	*	*
BENTON	20	2	*	*
BLEDSOE	6	*	*	*
BLOUNT	32	32	39	*
BRADLEY	93	*	*	*
CAMPBELL	82	*	78	*
CANNON	4	*	*	*
CARROLL	49	7	*	*
CARTER	39	*	73	*
CHEATHAM	7	*	*	*
CHESTER	15	2	*	*
CLAIBORNE	26	*	10	*
CLAY	15	*	*	*
COCKE	40	*	13	*
COFFEE	53	7	*	*
CROCKETT	49	14	*	*
CUMBERLAND	56	*	*	*
DAVIDSON	362	164	*	*
DECATUR	13	*	*	*
DEKALB	38	*	*	*
DICKSON	16	*	*	*
DYER	57	*	*	*
FAYETTE	36	*	*	*
FENTRESS	29	*	*	*
FRANKLIN	28	1	*	*
GIBSON	80	50	*	*
GILES	20	*	*	*
GRAINGER	11	*	22	*
GREENE	99	*	94	*
GRUNDY	5	*	*	*
HAMBLEN	34	*	13	*
HAMILTON	287	*	*	*
HANCOCK	36	*	29	*
HARDEMAN	52	*	*	*
HARDIN	42	*	*	*

County	HUGS (Families served)	Healthy Start (Families Served)	CHAD (Children served)	Nurse Family Partnership (Pregnant women served)
HAWKINS	78	*	88	*
HAYWOOD	63	*	*	*
HENDERSON	64	*	*	*
HENRY	21	12	*	*
HICKMAN	15	*	*	*
HOUSTON	1	*	*	*
JACKSON	7	12	*	*
JEFFERSON	30	9	3	*
JOHNSON	30	*	25	*
KNOX	263	210	*	*
LAKE	11	5	*	*
LAUDERDALE	34	*	*	*
LAWRENCE	32	*	*	*
LEWIS	4	*	*	*
LINCOLN	38	6	*	*
LOUDON	10	4	26	*
MACON	36	*	*	*
MADISON	33	116	*	*
MARION	26	*	*	*
MARSHALL	22	5	*	*
MAURY	38	2	*	*
MCMINN	56	*	*	*
MCNAIRY	50	*	*	*
MEIGS	26	*	*	*
MONROE	24	*	17	*
MONTGOMERY	53	134	*	*
MOORE	4	*	*	*
MORGAN	15	*	16	*
OBION	35	19	*	*
OVERTON	14	16	*	*
PERRY	3	*	*	*
PICKETT	9	*	*	*
POLK	17	*	*	*
PUTNAM	84	69	*	*
RHEA	21	*	*	*
ROANE	27	*	23	*
ROBERTSON	13	*	*	*
RUTHERFORD	176	10	*	*

County	HUGS (Families served)	Healthy Start (Families Served)	CHAD (Children served)	Nurse Family Partnership (Pregnant women served)
SCOTT	10	*	39	*
SEQUATCHIE	10	*	*	*
SEVIER	63	*	30	*
SHELBY	446	148	*	118
SMITH	28	*	*	*
STEWART	18	7	*	*
SULLIVAN	301	*	*	*
SUMNER	150	*	*	*
TIPTON	87	*	*	*
UNICOI	52	*	86	*
UNION	14	*	8	*
VAN BUREN	1	*	*	*
WARREN	13	*	*	*
WASHINGTON	125	*	252	*
WAYNE	6	*	*	*
WEAKLEY	29	22	*	*
WHITE	32	27	*	*
WILLIAMSON	55	*	*	*
WILSON	131	*	*	*
TOTAL SERVED	5028 families	1148 families	997 children	118 pregnant women

^{*} Program not available in county