Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program

Statewide Needs Assessment
Colorado

Colorado Department
of Public Health
and Environment

Conducted by the Title V, Maternal and Child Health Program
Prevention Services Division
Colorado Department of Public Health and Environment

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Colorado Department of Public Health and Environment

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Introduction

On March 23, 2010, President Obama signed into law the Patient Protection and Affordable Care Act of 2010 (Affordable Care Act) (P.L. 111-148), which is designed to make quality, affordable health care available to all Americans. A provision in the Act created the Maternal, Infant, and Early Childhood Home Visiting grant program. This program is intended to help states respond to the needs of children and families in communities at-risk, in order to improve health and developmental outcomes for children, through the implementation of evidence-based home visitation programs. The grant program is designed to: 1) strengthen and improve the programs and activities carried out under Title V (including the State Maternal and Child Health Program); 2) improve coordination of services for at-risk communities; and 3) identify and provide comprehensive services to improve outcomes for families who reside in at-risk communities, as defined by a needs assessment.[1]

In order to fulfill requirements necessary to receive FY 2010 Affordable Care Act (ACA) Maternal, Infant and Early Childhood Home Visiting Program funding, states have been instructed to complete three steps:

1. The first step was submission of an application for funding that was completed in July 2010.
2. This second step is submission of a statewide needs assessment, as required in legislation, due September 20, 2010.
3. The last step will be submission of an updated state plan to include a more detailed needs and resources assessment for targeted communities. No date has been provided for this activity.

The statewide needs assessment must address the following three components:

A. DATA REPORT: The data report identifies Colorado's "at-risk" communities for purposes of the assessment, and discusses the methodology used. The Federal guidance instructed states to determine "communities with concentrations of: premature birth, low-birth-weight infants, and infant mortality, including infant death due to neglect, or other indicators of at-risk prenatal, maternal, newborn, or child health; poverty; crime; domestic violence; high rates of high-school drop-outs; substance abuse; unemployment; or child maltreatment."
B. HOME VISITATION PROGRAMS: An assessment is required of the quality and capacity of existing early childhood home visiting programs in the state.
C. THE SUBSTANCE ABUSE TREATMENT**:** An assessment is required of the State's capacity to provide substance abuse treatment and counseling services to individuals and families in need.

This assessment is Colorado's response to the legislative requirement and Federal guidance issued in August 2010, and was conducted in cooperation with Colorado's Title V Maternal Child Health (MCH) Program, Director of Title II of the Child Abuse Prevention and Treatment Act, the Colorado Division of Behavioral Health, and Colorado's Head Start Program, as required. Letters of support from these entities are attached. This assessment followed the lead of the five-year Title V MCH Needs Assessment for 2011-2015, which utilized a conceptual framework focusing on the Life Course Health Development Model. The model suggests that each life stage influences the next, and there are critical time periods when a positive (protective) or negative (risk) factor has a stronger effect than it would have during other developmental periods. Such critical periods include prenatal and childhood. Experiences during these periods, including an intervention like early home visitation, can strongly influence a child's health trajectory for a lifetime.[2]

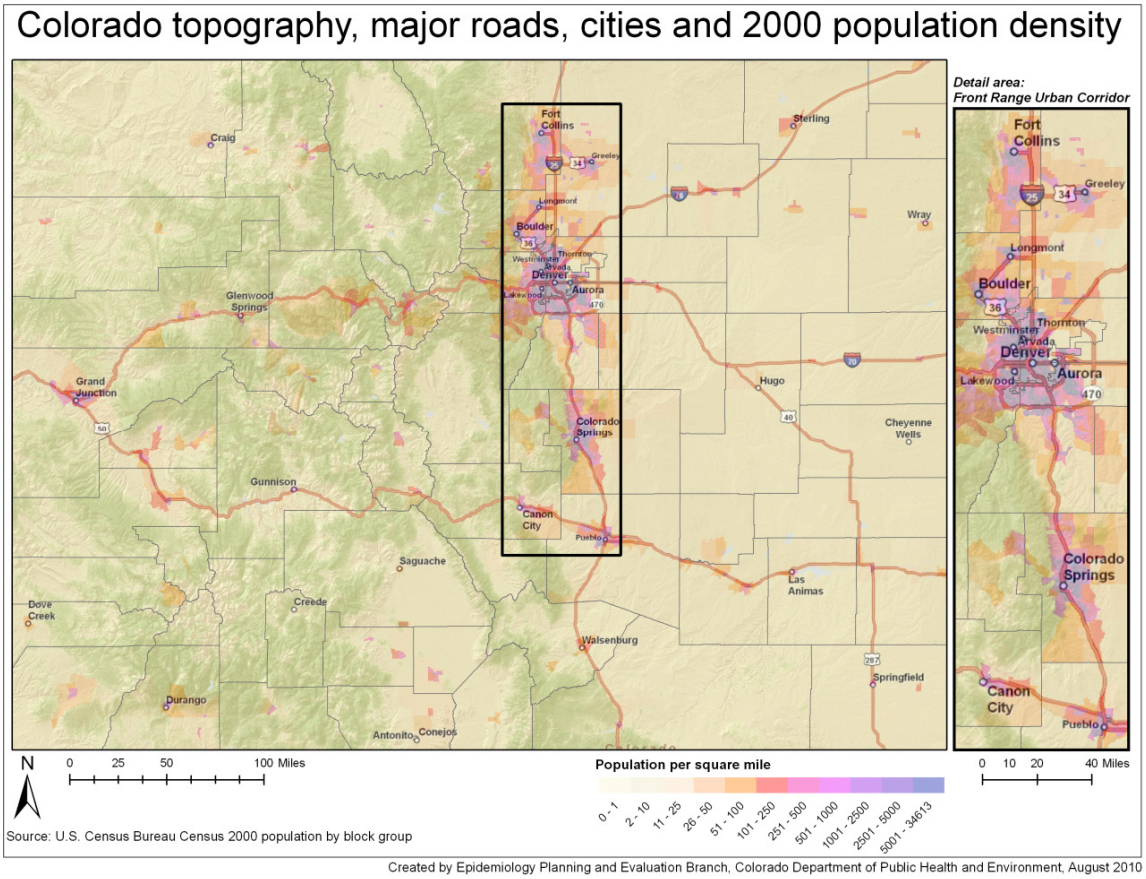
[1] Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program Supplemental Information Request for the Submission of the Statewide Needs Assessment, Health Resources and Services Administration.
[2] The Health Status of Colorado's Maternal and Child Health Population, June 2010 report (Revised 09/01/2010), Colorado Department of Public Health and Environment, website: http://www.cdphe.state.co.us/ps/mch/healthStatus.html

Overview of Colorado

Colorado is a western state, bisected into eastern and western slopes by the Rocky Mountain range. The state has the eighth largest area of land mass in the U.S., and its borders form an almost perfect rectangle, measuring 387 miles by 276 miles. The eastern half of the state consists of grassy plains and rolling prairies, and known for its agriculture, which is in stark contrast to the mountains that gradually rise westward and give Colorado the highest the mean elevation of any state.[3] The metropolitan Front Range (where the plains meet the mountains), extends north to south along the foothills, and includes the capital of Denver, with an elevation of 5,280 ft. which gives the city its nickname of "Mile High City."

Colorado's vast area of land mass and 2009 estimated population of 5,024,748 give it a ratio of 41.5 persons per square mile, compared to the U.S. at 79.6. Eighty-two (82) percent of the state's population live in 16 counties along the Front Range, and one county on the Western Slope. The other 18 percent of residents are scattered throughout Colorado's 47 rural and frontier counties.[4] Front Range population centers include the cities of Denver, Aurora, Boulder, Ft. Collins, Greeley, Colorado Springs, and Pueblo. The city of Grand Junction, located in Mesa County, is the major metropolitan area on the Western Slope (Figure 1).[5]

FIGURE 1.



[3] Colorado Department of Personnel Administration. Colorado State Archives Geography Page (2009), website: http://www.colorado.gov/dpa/doit/archives/geography.htm

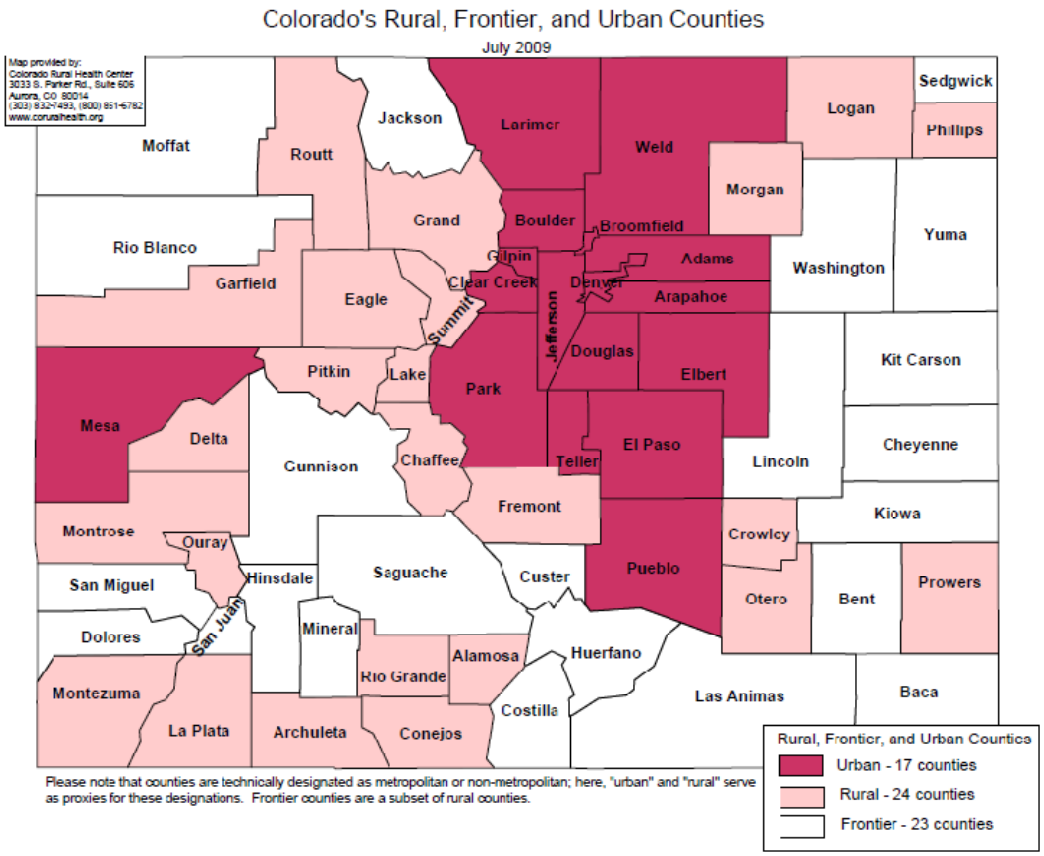
[4] "Population Total for Colorado and Substate Regions: Forecasts in 1 Year Increments, 2000-2035." Colorado Department of Local Affairs, Division of Local Governments, website: www.dola.state.co.us/dlg/demog/pop_colo_forecasts.html

[5] "Colorado Quick Facts," U.S Census Bureau, website: www.quickfacts.census.gov/qfd/states/08000.html

Colorado has unique features, similar to many western states: few urban centers with vast rural areas, the topography of the Rocky Mountains, and the snowy winters. These features, while attractive to residents, create service challenges, which make them important considerations when assessing the need for health and human service programs. Of Colorado's 64 counties, 24 are considered rural and 23 frontier (defined as less than six persons per square mile). Eleven (11) of Colorado's frontier counties have two or fewer persons per square mile (Figure 2). [6] Colorado has more than one thousand peaks over 10,000 feet high, and many western slope counties find themselves geographically isolated by winter weather and mountain passes. The following excerpt was taken from one such county's Early Head Start needs assessment.

> *Eagle County, Colorado, is a mountainous, rural area, located on the Western Slope of the state. The county has an elevation high of 10,603 ft. at the top of Vail Pass, and an elevation low of 6,150 ft. at the east end of the county...Some health and human service programs have to be accessed through neighboring counties. These are minimally an hour's drive away in good conditions, over a mountain pass to the east, and through a canyon to the west. During the winter, weather conditions make them inaccessible on any given day.*[7]

FIGURE 2.



Geography, weather and population must factor into decision making regarding service delivery. The state will discuss these issues in more depth when submitting the updated state plan in Step 3 of the Maternal, Infant, and Early Childhood Home Visiting program application process.

[6] Colorado Rural Health Center, July 2009. Website: www.searchcolorado.org/Rural_Urban_Frontier_Map.pdf
[7] "Eagle County Early Head Start Community Assessment: September 2009," Eagle County Health & Human Services, Early Childhood Services

SECTION A: Data Report

For the purposes of this assessment, the Federal guidance instructed states to "Identify communities with concentrations of: premature birth, low-birth-weight infants, and infant mortality, including infant death due to neglect, or other indicators of at-risk prenatal, maternal, newborn, or child health; poverty; crime; domestic violence; high rates of high-school drop-outs; substance abuse; unemployment; or child maltreatment." The guidance defines an "at-risk" community as a community for which indicators, in comparison to statewide indicators, demonstrate that it is at greater risk than is the state as a whole.

In order to develop a methodology, a work group of content experts was assembled. Members had a background in early childhood, adolescent and maternal health, and child abuse and neglect, along with expertise in epidemiology, data analysis/ interpretation, and assessment and planning. This group reviewed the federal guidance, selected a definition of community, reviewed available indicators, and chose a method for identifying at-risk communities in Colorado.

Methodology

Defining Community

When determining communities at-risk, the federal guidance allowed states to define "community." Indicators were most readily available at the county level (most counties don't have a large enough population to use zip-code level data), so this was chosen as the unit of measure for "community." However, in a few cases, small population densities necessitated that a regional-level indicator be used when county-level data was affected by data suppression.

Identifying Indicators

The federal guidance provided 15 required indicators and the metrics to be used for the needs assessment. If data on a particular indicator wasn't available, states were instructed to use an alternative indicator or document the lack of data. Colorado data was not available for domestic violence[8] and the juvenile crime arrest rate indicated had to be modified.[9] Footnotes on these data issues are provided below. To meet the legislative definition of an at-risk community ("a community for which indicators, in comparison to statewide indicators, demonstrate that the community is at greater risk than is the State as a whole"), the indicators selected for analysis needed to be meaningful and accurate, and the results needed to vary enough from the state average to represent significant differences. Therefore, indicators not meeting these assumptions were excluded from the analysis, including: child maltreatment by type[10] and four substance abuse indicators.[11] Although these were excluded from the analysis used to determine communities at risk, their metrics are provided in Appendix A, as required by the Federal guidance.

[8] Note: Data for the domestic violence indicator was unavailable; there is currently no population-based data collected regarding domestic violence in Colorado; therefore this indicator was omitted.

[9] Note: The federal guidance asks for a juvenile crime arrest rate for juveniles age 0 – 19 years, but the publicly-available data from the Colorado Bureau of Investigations was for juveniles was limited to 10 – 17 years of age.

[10] Note: Child maltreatment by type is a data subset of the overall maltreatment rate, which is a more meaningful and accurate indicator, given small numbers of events and the small population sizes of some counties. Therefore, overall maltreatment rates were used for the analysis that defined at-risk communities; however subtypes were collected and recorded in Appendix A.

[11] Note: Four substance abuse indicators (binge drinking, marijuana use, nonmedical use of prescription drugs, and use of illicit drugs excluding marijuana) were excluded because data provided by the Sub-state Treatment Planning reports combined county data into large regions, and the variance between the seven regional estimates and compared with the state estimate was too small to identify any true differences.

In addition to the required indicators, the federal guidance allowed states to include other indicators relevant to maternal, infant, and child health. The work group decided to include four additional indicators: 1) infant death rate (per 100,000) due to neglect and abuse as reviewed by the Colorado Child Fatality Committee; 2) percent of children born to a high risk mother as identified by three risk factors (unmarried, under 25 years of age and without a high school diploma); 3) child death rate (per 100,000) for children ages 1 – 14; and, 4) percent of children (under age 18) living in poverty.[12]

The 13 total indicators that were included in the analysis to determine communities at risk included:

- Percentage of premature birth
- Percentage of low birth weight infants
- Infant mortality rate
- Infant death rate due to neglect and abuse
- Percentage of women with three risk factors as defined above
- Overall child maltreatment rate
- Child death rate
- Percentage of children in poverty
- Juvenile crime arrest rate
- Percentage of high school dropouts
- Reported overall crime rate
- Percentage of unemployment
- Proportion of individuals below the federal poverty level.

As indicated above, all indicators were defined using rates or percentages, which are appropriate for comparison; however, there are some limitations. First, small numbers of events and/or a small population size can be misleading by making a problem seem more acute than it actually is.[13] Secondly, using rates and proportions does not assess the burden of the problem in terms of the total number of individuals affected.[14] Therefore, to portray a more accurate picture, the work group decided that indicators for similar counties (based on population size) should be compared to each other, rather than compared to all counties. Counties were divided into urban, rural, and frontier categories as defined by the metropolitan statistical areas of the U.S. Office of Management and Budget (OMB). Of Colorado's 64 counties, 17 (26%) are urban, 24 (38%) are rural, and 23 (36%) are frontier.

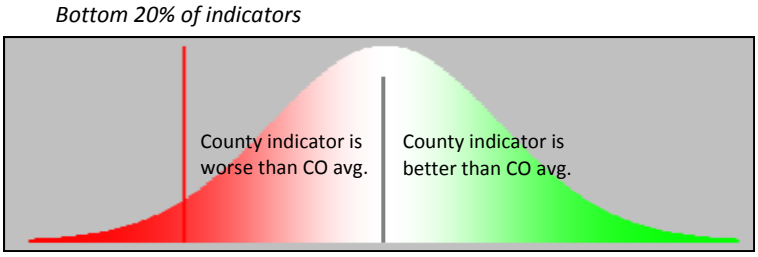
Next, the work group needed to define the magnitude of variance from the state mean in order for an indicator to be considered "at-risk." The state indicator is an average of county indicators--50 percent of counties are above and 50 percent below the state on any given indicator. To assure statistical significance, the workgroup opted to designate the bottom quintile (20 percent) of every indicator as a measure of risk. Figure 3 illustrates this principal.

[12] Note: The main data sources used were vital records (birth and death certificates); the indictor regarding children living in poverty was from the United States Census Bureau.

[13] Note: An example of this would be if a smaller county experienced two events in one year (i.e., child death) and four events in the next, their rate of the event just doubled, which could be alarming in a larger community, but may not mean anything in a small one (i.e., if the smaller county's number of events varies from zero to five each year, both one and four events fall into what would be expected).

[14] Note: An example of this would be if a large community and small community had the same rate of a given issue (i.e., crime, poverty, premature births, etc.) and given the percentage of the population effected; however, the number of people affected may be 10 or even 100 fold in the larger community.

FIGURE 3.



A spreadsheet was developed listing all counties, Colorado's 13 indicators, and the appropriate metrics. Indicators that were in the bottom quintile (20 percent) were flagged. Counties were then ranked based on the number of flags. A majority of counties had between 0-2 flags on all 13 indicators. A natural cut off point appeared between three and four flags. Rural and frontier counties having four or more flags and urban counties having three or more flags were defined as being "at-risk." Colorado counties, Colorado indicators and associated metrics have been attached to this document as Appendix A.

Results: Communities "At Risk"

Using the quintiles of risk approach, 15 Colorado counties were identified as being "at-risk" communities, including six urban, five rural, and four frontier counties. Figure 4 lists these counties, along with population characteristics and number of flags detected during the indicator analysis.

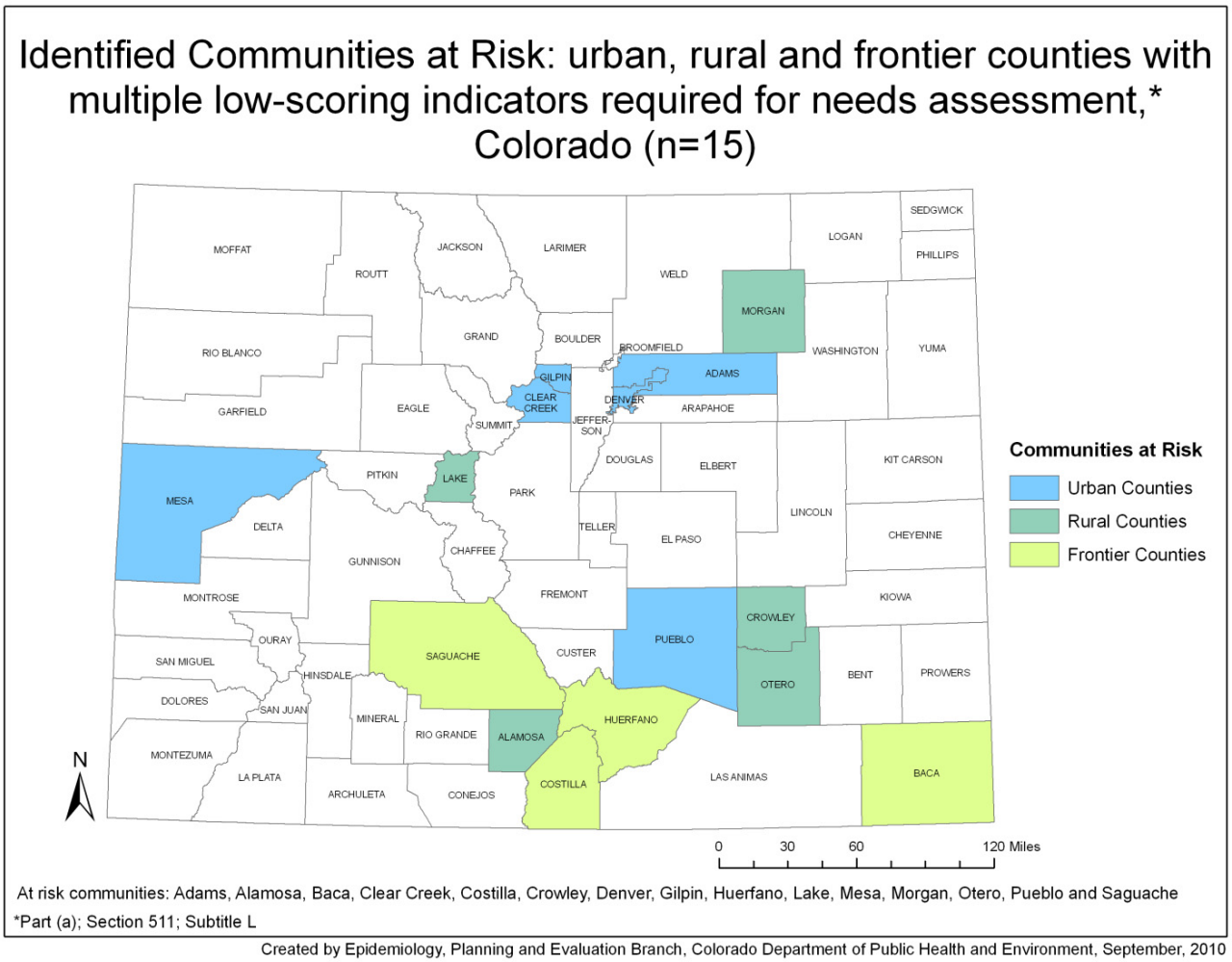
FIGURE 4:

"At-Risk," Counties, 2009 Population Characteristics and Number of Flags Identified

"AT-RISK" COUNTIES	POPULATION	% STATE POPULATION	# FLAGS
COLORADO	**5,011,326**		
Urban Counties	**4,310,748**	**86.0%**	--
ADAMS	434,762	8.7%	8
PUEBLO	157,388	3.1%	8
GILPIN	5,185	0.1%	5
MESA	144,444	2.9%	5
DENVER	611,510	12.2%	4
CLEAR CREEK	9,436	0.2%	3
Total	**1,353,289**	**27.0%**	--
Rural Counties	**566,468**	**11.3%**	--
ALAMOSA	15,904	0.3%	4
CROWLEY	6,257	0.1%	6
LAKE	8,345	0.2%	5
MORGAN	28,588	0.6%	4
OTERO	19,050	0.4%	5
Total	**78,144**	**1.6%**	--
Frontier Counties	**134,110**	**2.7%**	--
BACA	4,154	0.1%	4
COSTILLA	3,499	0.1%	5
HUERFANO	8,070	0.2%	7
SAGUACHE	7,074	0.1%	5
Total	**22,797**	**0.5%**	--

The Colorado map provided in Figure 5 displays the location of counties defined as "at-risk" by this needs assessment, and indicates whether it is considered urban, rural or frontier, as defined by the U.S. Office of Management and Budget.

FIGURE 5.



At risk communities: Adams, Alamosa, Baca, Clear Creek, Costilla, Crowley, Denver, Gilpin, Huerfano, Lake, Mesa, Morgan, Otero, Pueblo and Saguache

*Part (a); Section 511; Subtitle L

Created by Epidemiology, Planning and Evaluation Branch, Colorado Department of Public Health and Environment, September, 2010

Figure 6 illustrates the spreadsheet used to identify communities at risk. It provides the indicator, metric, data source and county, and compares the indicator to Colorado. It also lists the number of "flags" per county (the number of indicators in the bottom quintile or 20 percent of the state), and which indicators were flagged (in red). This spreadsheet was used for all counties in Colorado; however, only the counties indentified as being at risk by this assessment have been included. Colorado's "at-risk" counties will be examined more closely in Section B, which assesses the quality and capacity of early childhood home visitation programs, and Section C, which examines the state's ability to provide substance abuse treatment and counseling services to families in need.

FIGURE 6:
"At-Risk" Counties, Colorado's 13 Indicators and Metrics, and Number of Flags

INDICATORS	Premature Birth	Low Birth Weight	Infant Mortality	Deaths from Neglect and Abuse *(Colo Indicator)*	Three Maternal Risk Factors (unmarried, <25,<hs grad) *(CO Indicator)*	Child Deaths (ages 1-14) *(Colo Indicator)*	Children in poverty (≤18 years) *(Colo Indicator)*	Overall Maltreat-ment Rate (ages 0-17)	# Crime arrests per 1,000 juveniles (ages 0-17)	High School Drop-outs grades 9-12	# Reported Crimes per 1,000 residents	Unemploy-ment rate	Pop. Below Federal Poverty Level	County Type by Pop.	# Flags (in red)
DATA SOURCE	**Birth Cert.**	**Birth Cert.**	**Birth Cert.**	**Child Fatality Review**	**Birth Certificate**	**Death Certificate**	**US Census Bureau**	**CO Dept. Human Services**	**CO Bureau of Investi-gation**	**CO Dept. of Education**	**CO Bureau of Investi-gation**	**CO Dept. of Labor & Employment**	**US Census Bureau**	–	–
YEARS	**2006-2008**	**2006-2008**	**2004-2008**	**2004-2006**	**2008**	**2004-2008**	**2006-2007**	**2008**	**2009**	**2009**	**2009**	**Jul-10**	**2008**	–	–
UNIT OF MEASUREMENT	**percent**	**percent**	**per 1,000**	**per 100,000**	**Percent**	**per 100,000**	**percent**	**per 1,000**	**per 1,000**	**percent**	**per 1,000**	**percent**	**percent**	–	–
COLO COUNTY	9.7%	9.0%	6.2	10.6	6.7%	17.7	14.4%	8.6	75.0	5.0	34.6	8.0%	11.2%	–	–
BACA	14.4%	12.1%		0.0	15.0%	0.0	27.4%	3.6	7.1	17.2	9.2	4.0%	17.7%	Frontier	4
COSTILLA	**14.7%**	14.9%		0.0	12.9%	0.0	37.4%	0.0	0.0	0.6	0.0	12.4%	24.8%	Frontier	5
SAGUACHE	10.2%	9.4%	**17.8**	0.0	13.8%	0.0	**43.9%**	15.2	37.8	5.5	12.2	11.6%	29.9%	Frontier	5
HUERFANO	12.8%	**15.7%**	13.4	0.0	**16.3%**		31.5%	24.1	1.5	5.5	2.7	10.3%	23.8%	Frontier	7
ALAMOSA	8.7%	10.2%	**3.9**	0.0	8.9%	0.5	**32.5**	27.8%	**77.9**	3.7	**51.6**	7.2%	21.4%	Rural	4
MORGAN	10.3%	8.4%	**8.4**	0.0	**12.0%**	0.0	**44.7**	17.5%	**64.7**	**3.3**	20.4	6.8%	12.7%	Rural	4
LAKE	**12.8%**	**15.3%**		0.0	**17.5%**	1.3		**19.4%**	**29.7**	**10.5**	**16.8**	**11.2%**	**12.7%**	Rural	5
OTERO	**11.3%**	**9.4%**	8.2	0.0	9.2%	0.8	15.4	**31.5%**	63.0	1.8	**35.3**	**8.1%**	**22.2%**	Rural	5
CROWLEY	**12.8%**	10.6%	**0.0**	0.0	10.0%	0.0		**34.4%**	6.1	3.1	1.9	9.9%	**46.2%**	Rural	6
CLEAR CREEK	**11.2%**	**11.2%**	**14.6**	0.0	3.5%	1.4	0.0	11.0%	36.9	1.8	23.3	7.8%	7.4%	Urban	3
DENVER	10.0%	9.6%	7.1	**15.3**	**8.4%**	0.9	**21.4**	**25.2%**	**48.4**	**10.2**	**44.4**	**8.7%**	**18.0%**	Urban	4
GILPIN	**12.2%**	**14.5%**	**10.1**	0.0	5.2%	0.0	0.0	7.7%	39.5	3.0	**53.4**	6.9%	6.2%	Urban	**4**
MESA	**8.1%**	**7.6%**	**4.4**	**37.7**	**6.8%**	0.1	**23.6**	**13.6%**	**102.6**	**5.9**	**39.3**	**9.5%**	**10.6%**	Urban	**4**
ADAMS	**9.8%**	**9.1%**	**6.8**	**18.9**	**8.5%**	**13.8**	**16.6%**	**13.2**	**212.6**	**8.0**	**74.7**	**9.1%**	**12.0%**	Urban	8
PUEBLO	**9.2%**	**9.4%**	**6.3**	**33.5**	**13.0%**	0.1	**24.2**	**23.9%**	**9.8**	**6.3**	**45.8**	**9.8%**	**16.8%**	Urban	**8**

Note: A blank box indicates that data was suppressed so no county rate was available; however a regional rate was provided in Appendix A.
A zero in the box means that no event occurred in that county during the time frame.

SECTION B: Identify the Quality and Capacity of Existing Early Childhood Home Visiting Initiatives/Programs in the State

Overview

State government and other stakeholders have been focusing on systems development in the area of early childhood for several years, much of which has been spearheaded by the Early Childhood Systems Building Initiative, funded through the MCH Bureau. Toward this end, an Early Childhood Colorado Framework has been established, which guides system-building on the state and local levels Appendix B. This framework crosses multiple domains to ensure that all of Colorado's young children are valued, healthy, and thriving. Home visitation is part of a broad continuum of services that can impact the desired outcomes identified within this framework, such as increasing the number of children who live in safe, stable and supportive families.

As part of the early childhood system, the Colorado Parent & Child Foundation facilitates the Colorado Home Visitation Coalition (CHVC). The coalition's membership consists of state and local organizations that either implement or support the implementation of prenatal and early childhood home visitation programs. The CHVC defines home visiting as an effective service delivery strategy that promotes healthy child development, provides parenting support, and facilitates linkages to critical community services. System level work of the CHVC includes advocacy for home visiting as an effective service delivery model for connecting with hard-to-reach families, and cross-program/model communication and coordination as appropriate.

In addition, the Governor's Office, under the auspices of the Health Reform Implementation Board, recently convened the Early Childhood Home Visiting Stakeholder Group to advise the development of the ACA Maternal, Infant and Early Childhood Home Visiting Program grant application for Colorado. The stakeholder group has representation from constituents and advocates of home visitation programs, Colorado's early childhood system, and state agencies involved in health and human services.

For the purposes of this assessment, home visitation program models included meet the criteria listed in the federal statute: 1) home visiting is a primary intervention strategy for providing services to pregnant women and/or children birth to kindergarten entry, 2) programs are supported in full or in part by state or federal governmental funds, and 3) programs serve communities "at-risk", as identified in this assessment.

In terms of state funded programs, only the Nurse Family Partnership model has a designated state general fund line item, which is administered through the Colorado Department of Public Health and Environment. All other programs are administered through statewide, local or regional organizations. No single model of home visitation dominates at the local level. Programs are housed in school districts, family resource centers, child care and Head Start agencies, early childhood councils, divisions of local government, and other community-based nonprofit organizations. Programs receive funding from a variety of public and private sources (foundations, state and federal government grants, local public monies, and donors). Most local programs utilize multiple funding streams.[15]

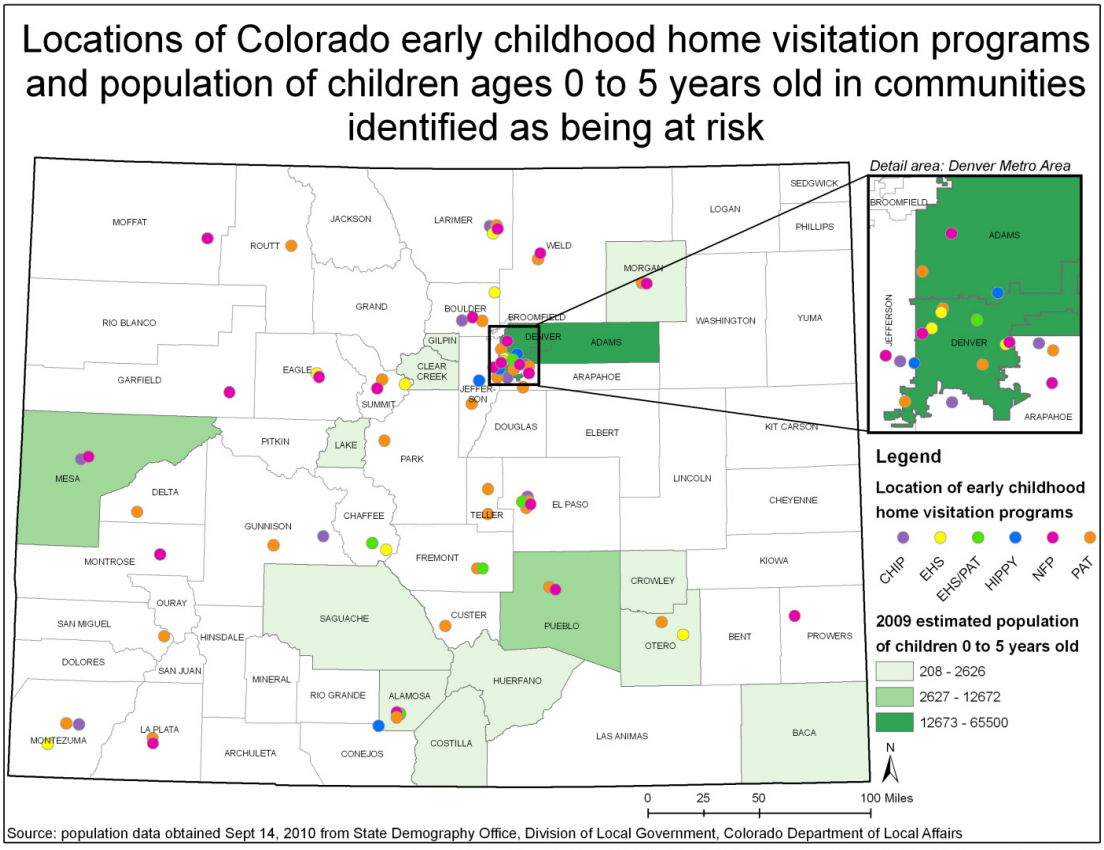
[15] "Home Visiting in Colorado: A Brief Overview," Colorado Parent and Child Foundation

To capture home visitation programs meeting the statutory definition for inclusion in this assessment, a formal Request for Information was distributed statewide.[16] This process assisted in the identification of potential models for future funding under the Affordable Care Act.
These models include:

- Home Instruction for Parents of Preschool Youngsters (HIPPY)
- Nurse-Family Partnership (NFP)
- Parents as Teachers (PAT)
- Early Head Start
- Colorado Home Visitation Program *(Statewide program for children with a hearing impairment)*

Home visitation programs, identified by this needs assessment, are located throughout the state as illustrated by Figure 7. It should be noted that the map only reflects the location of the agency only and not the service area. Many programs offer services regionally over several counties, so the home visitor travels outside of the county to provide services. The map also illustrates the population of children ages 0-5 in "at-risk" counties.

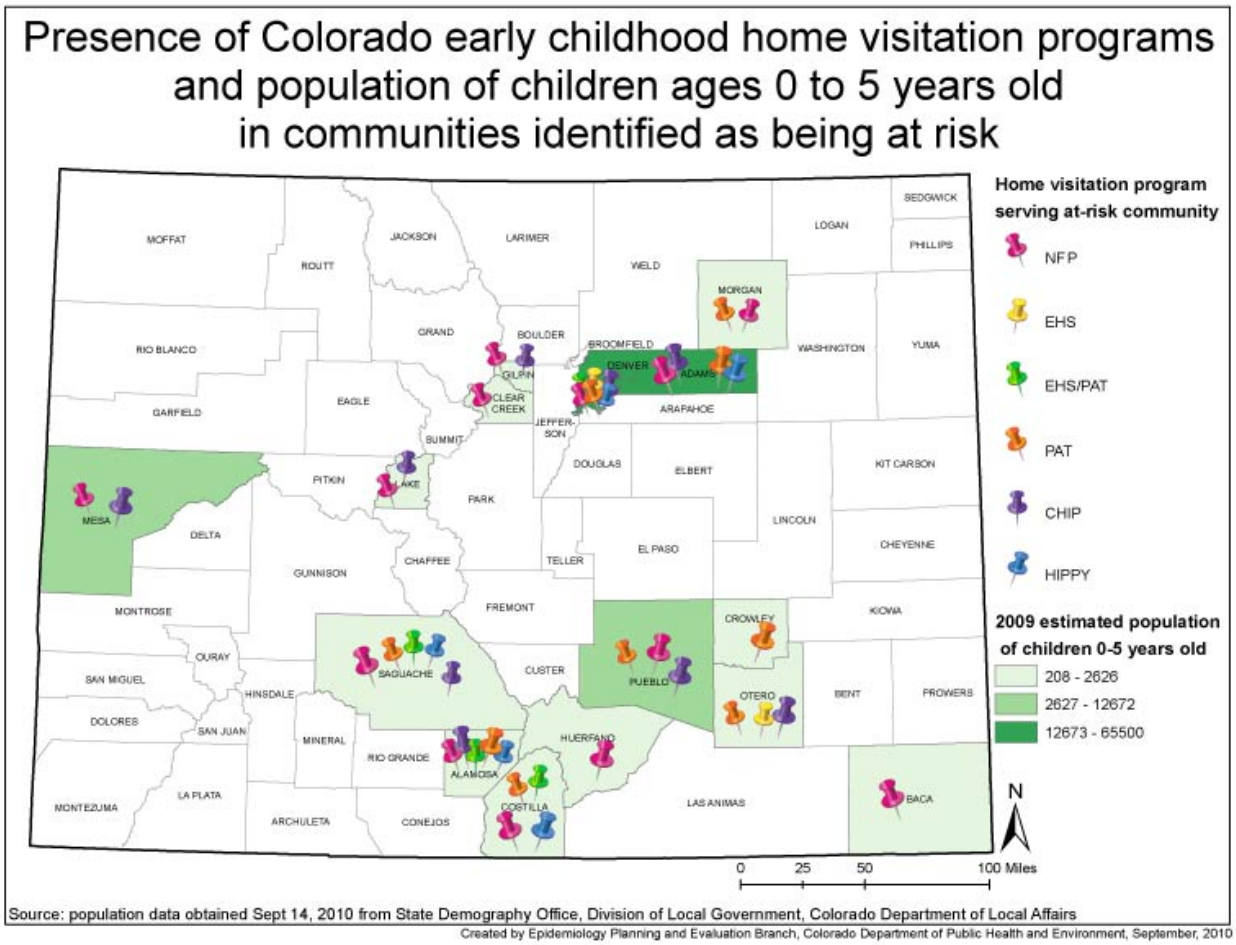
FIGURE 7.



[16] Note: A list of programs responding to the RFI are included in Appendix C

Figure 8 illustrates "at-risk" counties and where home visitation services are present, regardless of agency location. Because home visitation happens in the client's home, this map reflects the county in which visits occur, as opposed to the location of the program. For agencies that serve multiple counties, service within each "at-risk" county has been reflected.

FIGURE 8



Source: population data obtained Sept 14, 2010 from State Demography Office, Division of Local Government, Colorado Department of Local Affairs
Created by Epidemiology Planning and Evaluation Branch, Colorado Department of Public Health and Environment, September, 2010

The purpose of displaying these maps is twofold. Figure 7 can help assess the feasibility of regional expansion of new programs or the capacity of current ones, especially those in rural areas that require extensive travel to provide client services. Figure 8 illustrates the number of home visitation programs who have a presence in "at-risk" communities. Given the geography of mountainous counties and winter weather conditions that increase in severity with altitude, further assessment will be required during the planning process to ascertain if regional services can adequately address these needs, along with whether or not home visitation is the most cost effective intervention to be employed in these areas.

The federal guidance instructed states to "identify the quality and capacity of existing programs or initiatives for early childhood home visiting in the State include the number and types of programs and the numbers of individuals and families who are receiving services under such programs or initiatives; the gaps in early childhood home visiting in the State, including descriptions of underserved communities where possible; and

the extent to which such programs or initiatives are meeting the needs of eligible families." These areas will be explored for each home visitation model included in this assessment: PAT, HIPPY, NFP, CHIP and Early Head Start.

Parents as Teachers (PAT)

Overview

PAT is an early childhood home visitation model, with a National Center located in St. Louis, Missouri. PAT programs serve families from prenatal to age five, employing trained parent educators to conduct monthly home visits. In Colorado, parent educators generally have a bachelor's degree and work part-or-full-time. For families identified as having high needs, visits can occur several times per month. The visits generally last about 1.5 hours. The visits are designed to share child development and parenting information, plus engage parents in meaningful parent-child interaction.[17]

In 1999, the research-based "Born to Learn" curriculum was developed in collaboration with Washington University in St. Louis.[18] For prenatal up to age three, the curriculum focuses on neurological, language, intellectual, social, and physical development, as appropriate to the age of the child. During each visit, parent educators discuss the child's development and parenting topics, addressing questions and concerns the parent(s) may have. Home visitors then provide information about what to expect developmentally during the coming months. Visits also include a book sharing activity and recommended parent-child follow- up activities. The age three-to-kindergarten entry curriculum is presented in thematic units based on the needs and interests of the child and the goals of the parents, and can include literacy, math, motor skills, social-emotional development, art, games, music, and science.[19]

In addition to home visitation, the PAT model includes three additional components:

1. Group Meetings: The program offers at least monthly meetings that provide opportunities for parents to acquire more information about child development and parenting, while gaining support from each other.

2. Screening: All enrolled children receive developmental, hearing, vision, dental, and health screenings at least once per year. Developmental screenings include language, motor, and intellectual development and use instruments approved by the National Center. Many programs also conduct social-emotional and mental health screenings.

3. Resource and Referral: The PAT program links with organizations that advocate for and support the families and children that the program serves. The process for connecting families with community resources includes documentation and follow-up with the family or organization.

[17] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation
[18] "Parents as Teachers, an Evidence-Based Home Visiting Model Consistent with the Criteria and Requirements for the Maternal, Infant, and Early Childhood Home Visiting Program enacted as part of the Patient Protection and Affordable Care Act (P.L. 111-148," National Center for Parents as Teachers, April 9, 2010
[19] Ibid.

Eligibility

Although there are no formal eligibility requirements, most programs target communities in some way, based on:

- Income
- Children with special needs
- Parents with mental health or substance abuse issues
- Teen parents
- Literacy needs of parents
- Families at-risk for child maltreatment
- First-time parents
- Immigrant families
- Monolingual Spanish speakers
- Children of parents involved in the corrections system
- Children of military families
- Families in public housing

Colorado Programs

Figure 9 lists PAT programs and includes the number of children served during the last fiscal year, and the number of additional families that could be served without significant infrastructure changes (should funding become available) .[20] PAT programs no longer operating in 2010 were not included. Green shading indicates that one or more counties have been identified as "at-risk" by this assessment.

FIGURE 9:

Description of PAT Programs Operating in Colorado, State FY 2009-2010

County or Counties	Agency/Program	Program Affiliation(s)	# Children	# Add. Families
Adams	Growing Home/Home Grown Kids PAT		129	96
Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson	Rocky Mountain PAT		118	31
Alamosa	La Llave Family Resource Center, La Llave PAT	Family Literacy (Even Start) Family Res. Center	14	0
Alamosa, Costilla, Conejos, Rio Grande, Saguache	Alamosa School District San Luis Valley HIPPY/ PAT	HIPPY/ PAT	50	72
Arapahoe	Aurora Public Schools PAT	Family Literacy (Even Start)	40	0
Arapahoe	Arapahoe County Early Childhood Council/Arapahoe County PAT	Early Childhood Council	100	0
Arapahoe, Denver	Four Mile Family Resource Center PAT	Family Res. Center	32	0
Bent, Crowley, Otero	Tri County Family Resource Center PAT	Family Res. Center	45	24
Chaffee	Chaffee County Early Head Start, Chaffee County PAT	Early Head Start	30	0
Custer	Custer County Government, Magic Moments PAT		24	32
Delta	Delta County Family Literacy and Resource Center/Delta County PAT	Family Literacy Family Res. Center	36	0
Denver	Focus Points Family Resource Center/Focus Points HIPPY/PAT	Family Res. Center HIPPY/PAT	68	24

[20] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation

County or Counties	Agency/Program	Program Affiliation(s)	# Children	# Add. Families
Denver	Metro State College Family Literacy Program/Metro HIPPY/PAT	Family Literacy (Even Start) HIPPY/PAT	52	0
Denver	Family Star Montessori/PAT	Early Head Start	24	
El Paso	Colorado Springs School District 11 PAT	Family Literacy	64	4
El Paso	Community Partnership for Child Development PAT	Early Head Start	286	0
Fremont	Starpoint – Developmental Opportunities First Steps PAT & First Step EHS PAT	Family Resource Center	275	40
		FRC Early Head Start	55	0
Gunnison	Gunnison Literacy/Literacy Action PAT	Family Literacy (Even Start)	7	0
Jefferson, Park	Mountain Resource Center PAT	Family Res. Center	57	39
La Plata	La Plata Family Resource Center La Plata PAT	Family Res. Center	37	24
Larimer	La Familia Family Resource Center PAT	Family Res. Center	110	45
Montezuma, Dolores	Piñon Project PAT	Family Res. Center Family Literacy	52	24
Morgan	Morgan County Family Center	Family Res. Center	32	24
Park	Park County Schools/South Park PAT		117	0
Pueblo, Crowley	Catholic Charities Diocese of Pueblo/Family Education and Empowerment Program PAT		278	96
Routt	Family Development Center of Steamboat Springs/Newborn Network PAT		46	40
San Miguel, Ouray, West Montrose	Bright Futures for Children PAT Program	Early Childhood Council	80	60
Summit	Family Intercultural Res. Center PAT	Family Res. Center	124	0
Teller	Community Partnership Family Resource Center/Divide PAT	Family Res.Center	20	0
Weld	North Colorado Medical Center Foundation/Family Connects PAT		76	0
Total			**2478**	**675**

Figure 9 also identifies PAT program affiliations with other organizations and efforts as defined below.[21]

- Family Resource Centers: In Colorado, Family Resource Centers receive funding from the Colorado Children's Trust Fund housed at the Colorado Department of Public Health & Environment. The centers utilize a comprehensive community-based approach to improving

[21] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation=

health, social, educational and economic outcomes for families, specifically within high-risk urban and rural communities.

- Family Literacy (Even Start): These programs receive federal Even Start dollars. The grant, as administered through the Colorado Department of Education, requires use of PAT as the home visitation component.

- Family Literacy: These programs typically follow the federal Even Start literacy model, although they may not receive Even Start funding. While utilizing PAT, these programs also adhere to family literacy guidance from the Colorado Department of Education's Adult Education & Family Literacy Department, providing a range of services that address the basic educational needs of families such as General Educational Development (GED), adult basic education, English as a Second Language (ESL), etc.

- Early Childhood Councils (ECCs): ECCs focus on development and implementation of a comprehensive early childhood system, located in counties or regions throughout the state.

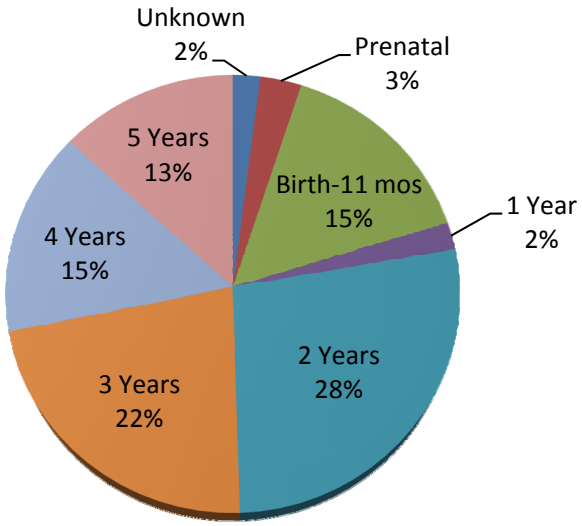
- Early Head Start: Federally-funded EHS programs serve low-income families with infants and toddlers, in addition to pregnant women utilizing federal guidelines.

- HIPPY/PAT Blend: These program sites provide PAT services for the prenatal-through-age-three population, and then HIPPY services for children ages 3-5.

Demographics

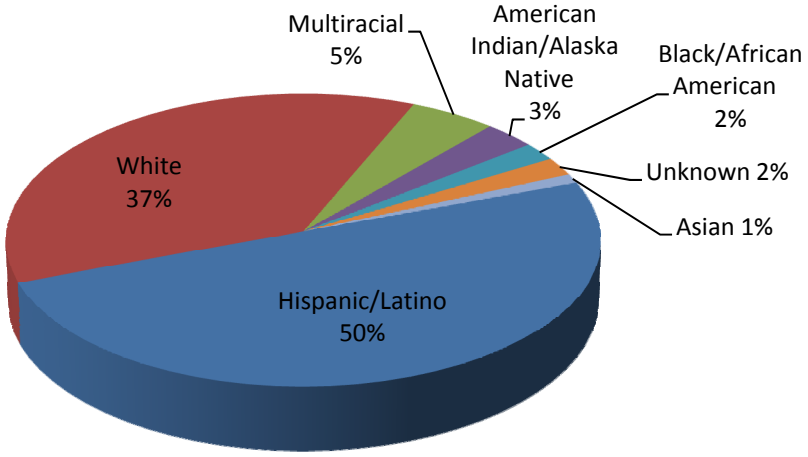
During state FY 2009-2010, PAT served nearly 2,700 children and their families in 35 counties. Figures 10 and 11 provide a breakdown by age and race/ethnicity.[22]

FIGURE 10: Age of PAT Participants (Prenatal - Age 5)
Colorado, FY 2009-2010 (N=2131)



[22] Parents as Teachers National Center, 2009-2010 Program Report: Colorado.

FIGURE 11: Race/Ethnicity of PAT Participants (Prenatal-Age 5)
Colorado, FY 2009-2010 (N = 2442)



Approximately 60 percent of PAT participants represent racial and ethnic minority populations. The National PAT curriculum has been translated into Spanish and Mandarin Chinese, although there are very few program participants who speak Mandarin in Colorado. Fifty percent of program participants are Hispanic/Latino and in some PAT programs, participants are exclusively monolingual Spanish speakers. Bilingual/bicultural Parent Educators serve the Spanish-speaking population.

According to Colorado FY2009-2010 data, 70 percent of families participating in PAT were characterized as having high needs. Figure 12 illustrates specific family characteristics related to those needs. Areas with the highest percentage include: 1) Low income, 2) Spanish speaking, and 3) Low educational attainment.[23]

FIGURE 12:
Characteristics of Families in Colorado PAT Programs: FY 2009-2010 (N=1998 Families)

Participant Characteristics	# Families	% Families
Low income *(Families eligible for Free and Reduced Lunches, Public Housing, Child Care Subsidy, WIC, Food Stamps, TANF, Head Start/Early Head Start, and/or Medicaid.)*	1430	72%
Spanish is the primary language spoken in the home *(Child speaks or hears Spanish more than 50% of the time that he/she is awake)*	740	37%
Low educational attainment *(Parent did not complete high school or GED and is not enrolled.)*	729	36%
Speakers of other languages/English Language Learners (ELL) *(Language other than English is the primary language spoken in the home.)*	690	35%
At least one parent is foreign-born	624	31%
At least one parent is a first time parent	584	29%
Single-parent household	416	21%
Multiple children under age 5 *(Three or more children under 3 years, or 4 or more children under kindergarten age.)*	335	17%
Child with disabilities *(The child being served has a physical or mental impairment that substantially limits one or more major life activities.)*	179	9%
Teen parents *(Parents under the age of 20 years, during the program year, with children P-5.)*	166	8%

[23] Parents as Teachers National Center, FY 2009-2010 Program Report: Colorado

Participant Characteristics	# Families	% Families
Involvement with mental health or social services agencies (child/parent)	159	8%
Children with serious behavior concerns *(Children exhibiting atypical behaviors for their age & developmental level.)*	108	5%
Low birth weight *(Birth weight is under 2,500 grams or 5.5 lbs., affecting the development of the child.)*	92	5%
Ongoing health problem of child, parent or sibling *(Ongoing health problem serious enough to substantially limit one or more major life activities.)*	89	4%
Transient/numerous family relocations and/or homeless *(Moves frequently; lacks a fixed, regular and/or adequate residence)*	77	4%
Relative who is the primary person in the parent support system *(Grandparents, aunts, uncles, etc., who have the primary care of the child/children.)*	58	3%
Parent with disabilities	60	3%
Referred to PAT program because of suspected child abuse *(Referred by appropriate agency due to suspected child abuse.)*	49	2%
Chemical dependencies *(The inability to stop drinking or taking drugs despite serious consequences.)*	46	2%
Involvement with the corrections system *(Incarcerated or probation-restricted parent.)*	35	2%
Military family (*A parent/guardian with orders issued by a military authority calling for active duty from organized units of the National Guard, or any component of the armed force of the United States.*)	23	1%
Death in the immediate family *(The death of the child, parent or sibling.)*	19	1%
Court-appointed legal guardians *(The child had court-appointed legal guardians.)*	16	1%
Foster parents *(The child is placed with foster parents.)*	15	1%
Adoptive parents *(An adoption occurring within the program year)*	12	1%

Ability to Meet Family Needs

Most PAT programs target communities based on identified risks that include the income and educational level of parents, special needs of the child or family, literacy level of parents, whether parents are at-risk due to chemical dependency or interaction with child welfare services, and recent immigration status. Also, many PAT programs are housed in larger agencies affiliated with government-funded programs that are already serving populations based on specific risk factors. Such programs include Head Start, Early Head Start, Family Resource Centers, and Family Literacy Centers. The following illustrates the percentage of Colorado PAT programs offering additional services to their clients, taken from individual Colorado PAT program reports to the National Center during FY 2009-2010:

Healthcare services	42.4%
Child care	42.4%
Family literacy	36.4%
Case management	30.3%
Early intervention/Part C	27.3%
Marriage strengthening	24.2%
Job skills	21.2%
Mental health/substance abuse services	18.2%
ESL classes	15.2%
Adult education/GED	12.1%

Colorado PAT programs have a 78 percent family retention rate. The reasons for and percentages of families leaving the program are listed below:[24]

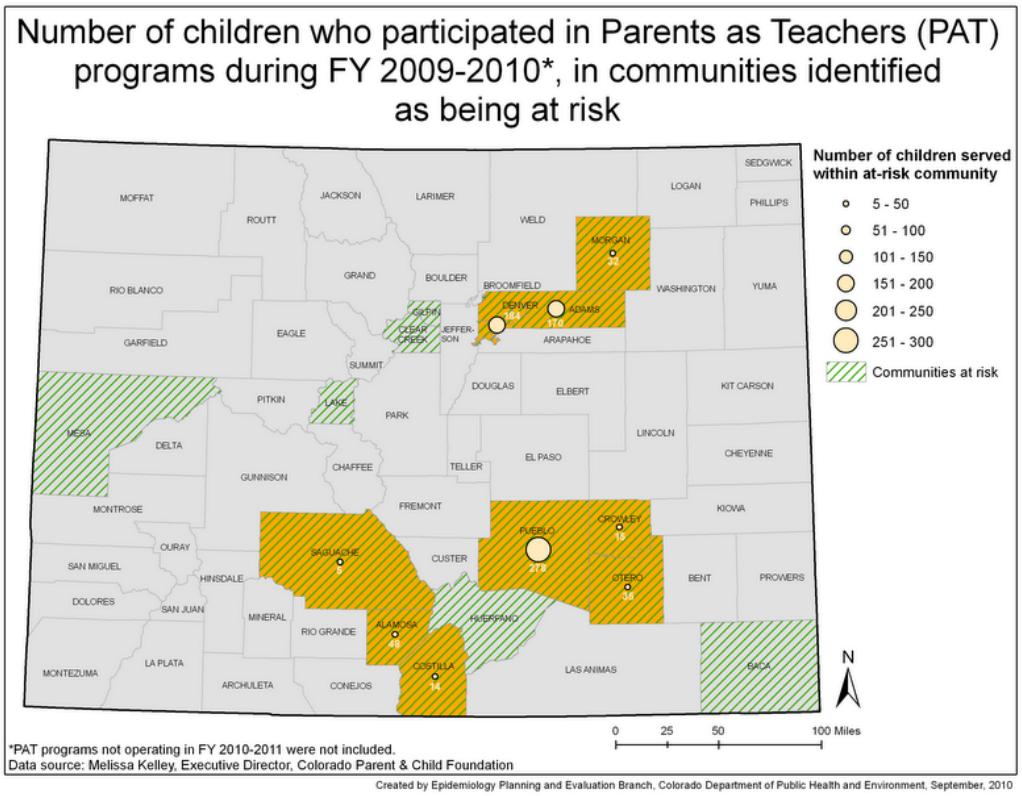
Completed services:	8%
Child/family moved:	4%
Regularly missed visits:	3%
Family couldn't be located:	3%
Left for other reasons:	2%
Family transitioned:	1%
Dissatisfied with PAT:	0%

There are families on waiting lists for PAT services, including those who have been identified as targets for services by individual programs. The number of additional families who could be served without significant infrastructure changes (should funding become available) was noted earlier in Figure 9.

Resources in "At-risk" Communities

For the purposes of this needs assessment, 15 counties have been defined as "at-risk" communities including: Denver, Adams, Clear Creek, Gilpin, Lake, Alamosa, Saguache, Mesa, Pueblo, Crowley, Morgan, Otero, Baca, Costilla, and Huerfano. Figure 13 displays PAT programs that exist within these communities and numbers of children served during FY2009-2010.

FIGURE 13.



[24] Parents as Teachers National Center, 2009-2010 Program Report: Colorado

Quality Assurance

The National Center for Parents as Teachers drives the mission and philosophy of PAT and is responsible for curriculum development and training, program quality standards, continuous quality improvement, and evaluation. As such, the National Center for Parents as Teachers: (1) pursues and supports independent evaluations of program quality and the impact on children and families; and (2) engages in ongoing continuous improvement of its curriculum, training, and products. Also, local programs are encouraged to actively work on building stronger evidence through ongoing evaluation and continuous quality improvement activities. Parents as Teachers training is required for implementing the model and utilizing the curriculum. Training and evaluation are based on the PAT logic model which links program activities to outcomes. The curriculum and training are revised regularly based on the latest research.[25]

The Colorado Parent & Child Foundation, as the official state office for Parents as Teachers in Colorado, conducts a variety of activities to ensure quality and fidelity in its PAT programs, including on-site monitoring and follow up visits, comprehensive data tracking through the PAT Visit Tracker online data management system, and regular training and technical assistance. On-site fidelity visits include an introductory meeting with staff, a home visit, group meeting observation, and a review of program documentation to ensure the minimum standards are being met in each area. Site visit exit meetings are also conducted where the site identifies areas of improvement and the Colorado Parent & Child Foundation identifies strategies to help them address those needs.

On-site quality follow up visits are delivered to sites that present needs that are best met via on-site consultation. CPCF matches each site with the most appropriate PAT Quality Consultant for the needs presented, who then provides 1-2 days of intensive consultation with the program. Nearly every PAT program in Colorado uses the Parents as Teachers nationally recommended Visit Tracker web-based family contact management database. This system helps state office staff to ensure fidelity to the model through detailed tracking of visits, group meeting attendance, screenings and resources and referral follow -up, as well as program management tools.

CPCF also provides ongoing training and technical assistance to all PAT programs in Colorado. This includes conducting core training institutes (foundational and model implementation training for PAT Parent Educators and PAT Supervisors - providing them with the initial training they need to be certified to implement the PAT program model); topical workshops and trainings (such as working with families of children with special needs, working with teen parents, understanding poverty, etc.); and a series of monthly webinars on topics related to program management as well as topics related to issues affecting families served Parents as Teachers).

Evaluation and Outcomes

The following evaluation results were provided in the source "Parents as Teachers, an Evidence-Based Home Visiting Model Consistent with the Criteria and Requirements for the Maternal, Infant, and Early Childhood Home Visiting Program enacted as part of the Patient Protection and Affordable Care Act (P.L. 111-148," from the National Center for Parents as Teachers. Study citations are not included below but are documented in the original source.

[25] "Parents as Teachers, an Evidence-Based Home Visiting Model Consistent with the Criteria and Requirements for the Maternal, Infant, and Early Childhood Home Visiting Program enacted as part of the Patient Protection and Affordable Care Act (P.L. 111-148," National Center for Parents as Teachers, April 9, 2010

- Studies have shown that PAT parents are more involved in their children's schools, happier taking care of their children, more knowledgeable about parenting practices and child development.

- Studies have shown that PAT children have higher standardized test scores in early elementary school (1st, 2nd, 3rd grade in CO, NY, and MO), have higher school readiness scores at Kindergarten entry (MO, NY, CA, & NC).

- Randomized controlled trials have shown that adolescent mothers who received PAT and case management had lower repeat pregnancy rates; that two-year olds of PAT families receiving the expected level of home visit were more fully immunized than children in the control families; that PAT children showed higher mastery motivation and social skills (Cleveland OH), and that children of PAT families receiving the expected level of home visits were less likely to be treated for injury in the previous year.

- A study found documented cases of child abuse and neglect to be significantly fewer in PAT families than the state average. Also, a randomized trial showed that adolescent mothers who received PAT and case management had fewer child abuse investigations. This latter study was one of 12 studies reviewed by Reynolds, Mathieson, & Topitzes (2009) which found significant effects in lowering substantiated or verified child maltreatment rates. The study is also listed as an evidence in CDC's The Community Guide—What works to promote health which recommends Early Childhood Home Visitation as means to prevent child maltreatment.

- A randomized controlled study in CA showed that children of primarily Spanish-speaking Latina mothers enrolled in PAT performed significantly better than the control in 4 of the 5 areas examined: cognitive, communication, social, and self-help.

Future areas of study:

- PAT is collaborating with domestic violence researchers to implement an evidence-based domestic violence screening tool developed for home visiting programs. This intervention will be integrated into Parents as Teachers starting January 2011.

- Beginning in January 2011, Parents as Teachers will recommend a family needs assessment tool for screening and measuring outcomes.

- The National Center currently has an evidence-based supplementary curriculum, "High Five for Kids," developed collaboratively with Saint Louis University/Washington University at St. Louis.

- Parents as Teachers will include evidence-based practices from this curriculum starting January 2011.

In addition to the research studies conducted nationally, the Colorado Parent & Child Foundation regularly collects and analyzes data across all program sites. Individual programs use Parent Satisfaction Surveys and Group Meeting Feedback forms regularly to self assess their programming; the Visit Tracker data management system includes tracking of information gleaned from each personal visit with each family; and most sites participate in a variety of site-specific evaluation activities as determined by their host agency and their various funding sources.

The CPCF also conducts external evaluations across a sampling of Parents as Teachers sites statewide, each year to assess and demonstrate outcomes. The sampling of sites has representation from both large and small programs, as well as urban, rural, and resort sites. From 2007-2009, CPCF used the *University of Idaho Survey of Parenting Practice*, a reliable, valid, and sensitive measure of change in parent knowledge, confidence, and practice among families participating in PAT programming for at least one year. The survey was conducted in both English and Spanish. Results of the survey were analyzed externally by the Center for Educational Policy Analysis (CEPA) at the University of Colorado at Denver, and revealed statistically significant gains in all areas measured (parent knowledge of how their child is growing and developing, what behavior is typical at their child's particular age, and how their child's brain is growing and developing; their confidence in terms of parenting, setting limits for their child, helping their child learn; and their ability to identify what their child needs, to respond effectively when their child is upset, and to keep their child safe and healthy. Other statistical gains included the amount of activities they do with their child, including reading, and their connection with other families and children).

For 2009-2010, CPCF worked with CEPA to develop a tool that directly aligned to the PAT logic model. The results showed statistically significant increases in parent knowledge, parenting practices, developmentally appropriate engagement in parent-child activities, and other areas. Most notably, the longer parents participate in the PAT program, the greater their gains in understanding and knowledge of parenting practices and child development.

Home Instruction for Parents of Preschool Youngsters (HIPPY)

Overview

HIPPY is an international program developed initially as a research and demonstration pilot project in 1969 by Dr. Avima Lombard and the National Council of Jewish Women Research Institute for Innovation in Education at Hebrew University in Jerusalem, Israel. The first program reached the U.S. in 1984, and reached Colorado in 1989. HIPPY has a national program office located in Little Rock, Arkansas. HIPPY utilizes a peer-delivery model where trained parents (from the population served) provide weekly, one-hour home visits for 30 weeks, working one-on-one with parents of preschool children, ages 3-5. The Age 5 curriculum follows the child through the kindergarten year, thus reinforcing learning through a very intentional home-school connection. In addition, HIPPY programs provide bi-weekly group meetings that allow parents to come together and share their experiences. Parents are strongly encouraged to attend, thus leaving the isolation of the home and learning from one another.[26]

The focus of the home visit is to teach the parent to use the HIPPY curriculum. Role play is used as a method of experiential learning to increase the parent's confidence and proficiency in directing their child's educational activities. The home visitor provides a weekly activity packet for both parent and child. At each visit, the previous week's work is reviewed and questions answered. The home visitor leaves the parent with new activities and a reminder of upcoming parent meetings or community events.[27]

The HIPPY curriculum is designed to foster school readiness and allow parents to be successful as their child's first and most influential teacher. Each curriculum year is sequential, providing the foundation for the next year's curriculum. For children ages 3 and 4, the curriculum contains 30 activity packets for each weekly visit. For age 5, which coincides with the kindergarten year, the curriculum has 15 packets. The curriculum also contains storybooks, activities, creative games, and other materials. The activity packets can be

[26] HIPPY national program office: http://www.hippyusa.org
[27] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation

compared to a well-written lesson plan for a novice teacher, and utilize a step-by-step approach that includes a careful sequencing of activities.[28] The curriculum promotes the following in children:

- Writing skills readiness
- Dramatic/creative play
- Problem solving/critical thinking
- Phonemic/phonological awareness
- Language development/verbal
- expression
- Math readiness/math concepts
- Memory/recall: visual memory
- Social-emotional development
- Fine motor/Gross motor control
- Observation skills
- Following directions
- Creative drawing
- Spatial perception
- Story comprehension
- Visual development
- Vocabulary development
- Independent thinking
- Health and safety
- Listening skills
- Auditory discrimination
- Enjoyment of reading
- Concept development
- Cultural awareness
- Eye-hand coordination
- Imagination/creativity
- Picture reading
- Scientific exploration
- Sensory discrimination
- Sequencing

Eligibility

Although HIPPY serves any parent who wants educational enrichment for their child, the HIPPY model was designed to remove barriers to participation due to lack of education, poverty, social isolation and other issues.[29] In Colorado, some HIPPY programs follow the eligibility of their parent program such as Head Start or Title 1 Schools (schools federally-defined as serving low income areas).[30]

Colorado Programs

Figure 14 lists and describes Colorado HIPPY programs, including the number of children served in FY 2009-2010, and number of children served with potential expansions recommended by the Colorado Parent & Child Foundation.[31] The green shading indicates the county has been defined as "at- risk communities."

FIGURE 14:

Description of Colorado HIPPY Programs during FY 2009-2010

County or Counties	Agencies/Program	Affiliation	# Children	# Potential New Children
Adams	Adams County Head Start/Adams HIPPY/Head Start	HIPPY/ Head Start	106	0
Alamosa, Costilla , Conejos, Rio Grande, Saguache	Alamosa Public Schools/San Luis Valley HIPPY/PAT	PAT/HIPPY	201	72
Denver	Clayton Early Learning Head Start/Clayton HIPPY /Head Start	HIPPY/ Head Start	99	12
Denver	Focus Points Family Resource Center/Focus Points HIPPY/PAT	Family Res.Center PAT/HIPPY	95	30
Jefferson	Jefferson County Public Schools/Jeffco HIPPY	Title 1 Schools – District wide	292	75
		TOTAL	**793**	**189**

[28] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation
[29] HIPPY national program office: http://www.hippyusa.org
[30] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation
[31] Note: This is defined as the number of additional families that could be served without significant infrastructure changes (should funding become available).

Demographics

Colorado HIPPY programs served 898 children during FY 2009-2010, in eight counties. (One program in Denver that served 105 children is no longer in operation.) In terms of gender, 54 percent of children served were male and 46 percent female. Figures 15 and 16 describe participants according to age and race/ethnicity.[32]

Figure 15: Age of Children Enrolled in Colorado HIPPY Programs, FY 2009-2010

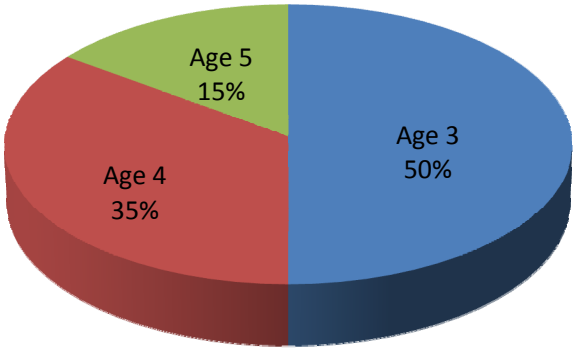
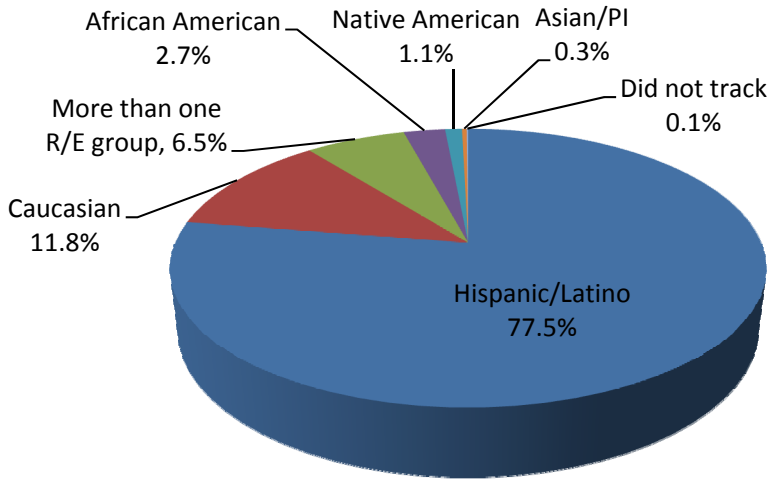


Figure 16: Number of Colorado HIPPY Program Child Participants by Race/Ethnicity, FY 2009/2010



During FY 2009-2010, 54.4 percent of HIPPY families received the curriculum in Spanish and 45.6 percent of families received visits in English. According to 2008 figures, 90 percent of Colorado HIPPY families served were low income and 54 percent of children resided in families with one or more parents having no high school diploma or equivalency.

[32] Melissa Kelley, Executive Director, Colorado Parent & Child Foundation

Ability to Meet the Need of Families

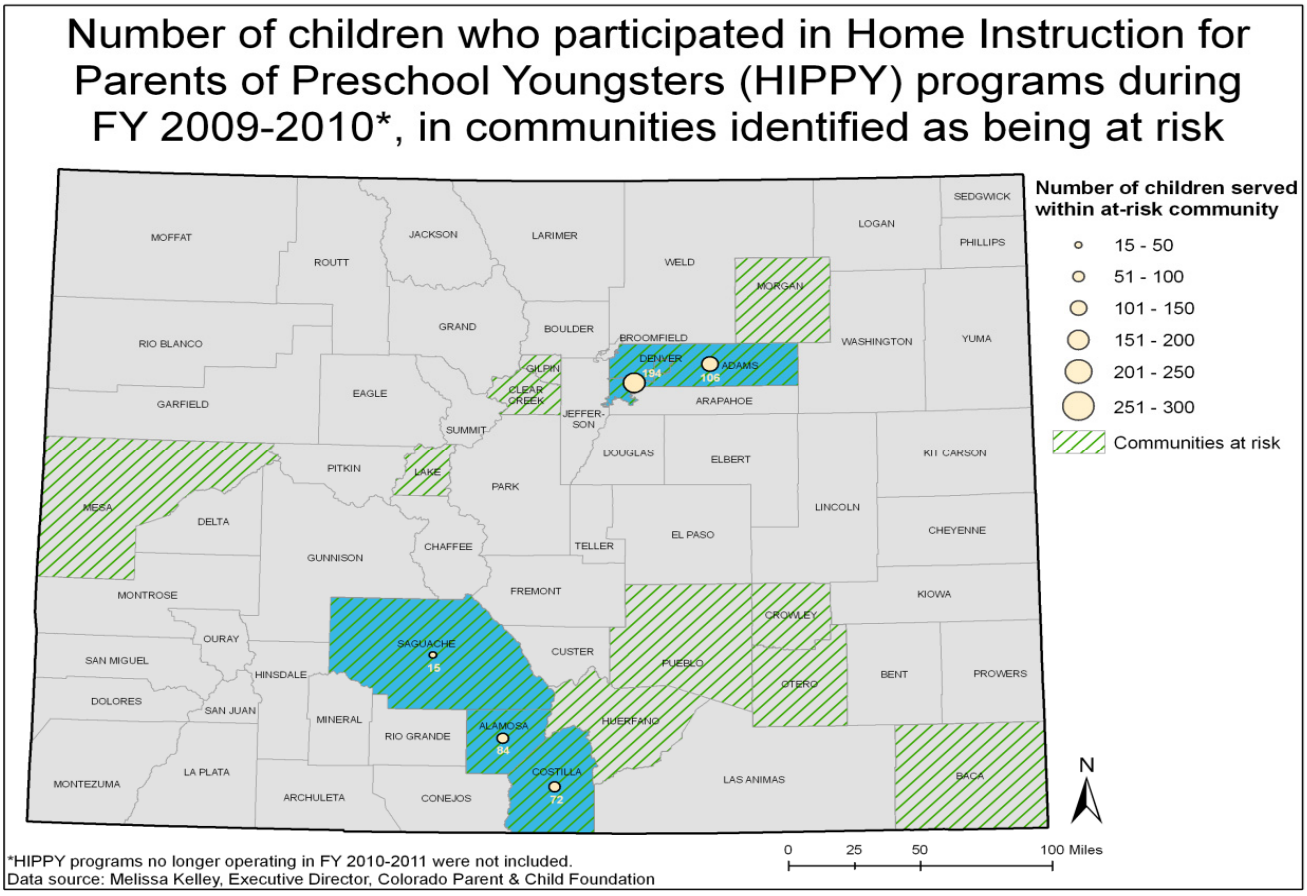
The HIPPY model utilizes home visitors that are recruited from the parent population served, who act as peer mentors while also receiving job training as a home visitor. In this way, parents have the opportunity to increase their self-sufficiency just by participating in the program. Also, most HIPPY home visitors (who were prior HIPPY clients) are also national AmeriCorps members, which promotes additional civic engagement. Some home visitors are bicultural/bilingual and others are monolingual Spanish speakers. Several HIPPY programs in Denver serve primarily monolingual Spanish speaking families.

Two metro-area HIPPY programs reside in federally-funded Head Start program sites, which means that these sites are utilizing the HIPPY model to deliver the "home based option" for Head Start (so the families are participating in Head Start through home visitation, not center-based service). Head Start provides comprehensive child development services to economically disadvantaged children and families.

Resources in "At-risk" Communities

For the purposes of this needs assessment, 15 counties have been defined as "at-risk" communities including: Denver, Adams, Clear Creek, Gilpin, Lake, Alamosa, Saguache, Mesa, Pueblo, Crowley, Morgan, Otero, Baca, Costilla, and Huerfano. Figure 17 displays the HIPPY Programs that exist within these communities and numbers of children served during FY2009-2010.

FIGURE 17.



Quality Assurance:

Model fidelity for HIPPY is ensured through intensive and ongoing training as well as annual site visits. Prior to implementing the program, HIPPY coordinators attend a comprehensive five-day National HIPPY Pre-Service Training. The Colorado Parent & Child Foundation, as the official state office for HIPPY in Colorado, provides an annual two-day HIPPY Management Institute at the start of every program year, as well as a series of ongoing training and technical assistance, to impart relevant, up-to-date information about HIPPY program implementation, provide training in specific areas, and provide information related to annual management, evaluation, and resources. Home visitors receive weekly training in the HIPPY model and its research-based curriculum. Each HIPPY site undergoes and annual self-assessment process that evaluates each component of programming, which is then validated through an on-site visit by a HIPPY trainer who has been certified by HIPPY USA to conduct these validation visits. The results from the validation visits are then used to conduct ongoing technical assistance, both on-site and through training, to address any areas of improvements noted by the HIPPY trainer. HIPPY sites regularly collect and submit program data through the HIPPY Management Information System that captures both weekly tracking on home visit progress as well as ongoing program impact.

Evaluation and Outcomes

HIPPY has forty years of research showing positive outcomes for participating families. Studies on the program have been conducted in eight countries as well as across the United States, and has shown HIPPY to be effective in improving child school readiness, parent involvement, academic performance throughout K-12 schooling, school attendance, behavior, and standardized test scores. For instance:

- A randomized controlled trial in New York found that HIPPY children had higher measures of cognitive skills, classroom adaptation, and reading scores.
- Multiple quasi-experimental and longitudinal studies have consistently shown HIPPY children have higher rates of school attendance, higher test scores, stronger kindergarten readiness, early reading and math gains, cognitive development, language development, and social-emotional development.
- Multiple studies have shown HIPPY children have fewer incidents of suspension and better classroom behavior than control children.
- Qualitative and non-experimental studies of the program have shown that families who participate in HIPPY generally require a broader set of services and supports than HIPPY alone can provide, and that the program is effective at coordinating appropriate referrals for other community supports.
- HIPPY parents have greater involvement in their child's education, including factors such as parent attendance at school functions and parent involvement in classroom activities, as well as increased parent-child reading time.
- A randomized controlled trial in California among low-income Mexican-American immigrant mothers found that parent participation in group meetings resulted in a significant difference among expressive language outcomes for HIPPY children.
- Another study showed that participation in HIPPY produced positive parenting behaviors and parents in the non-HIPPY group reported significantly more attachment-related stress.

In addition to research that has been conducted nationally, internationally, and in multiple states, the Colorado Parent & Child Foundation also conducts statewide evaluation of HIPPY in Colorado. This includes both annual evaluation of program impacts, which uses instruments appropriate for the measurement of outcomes against the program's logic model, as well as externally conducted research studies commissioned by the Colorado Parent & Child Foundation with foundation support from a variety of Colorado funders.

Some of the recent Colorado studies have included:

- A single subject experimental multiple baseline design study of Colorado's HIPPY children showed that the progression of child learning to be the direct result of HIPPY and not other interventions.

- A quasi-experimental study showed that Colorado's HIPPY parents had stronger gains in employing home teaching activities related to school readiness (including beginning reading strategies, beginning math strategies, science activities, vocabulary building, and understanding stories) than non-HIPPY parents. In fact, non-HIPPY parents made no significant gains over the same time period. HIPPY parent gains were statistically significant.

- Another quasi-experimental study showed that Colorado's HIPPY parents read more often to their children than those in the control group and that HIPPY parents rated higher on the reading quality scale (interaction/engagement) than the control group.

- A qualitative study among 19 kindergarten teachers across 6 HIPPY communities in Colorado revealed that HIPPY children are better prepared for kindergarten literacy instruction, are better behaved and more used to school routines, and are more engaged in comparison to non-HIPPY children. Further, the study found that HIPPY parents are more involved in classroom activities and in their child's education than non-HIPPY parents.

- Three years of standardized pre-post testing using the Woodcock-Johnson Tests of Achievement amongst 216 Colorado HIPPY children before and after participation in HIPPY showed increases in all areas tested (letter-word recognition, story recall, understanding directions, picture vocabulary, oral comprehension, sound awareness). Twenty-seven out of thirty gains were statistically significant.

- A five year longitudinal impact study of the impact of HIPPY in Alamosa, Colorado compared school grades, teacher ratings, test scores, attendance records, and parental involvement for 318 children (159 in both the HIPPY and the comparison group) in kindergarten and 272 of those children (136 in each group) again in fifth grade, found HIPPY children performing better than comparison children in the developmental areas of reading, receptive language, expressive language, social, emotional, gross motor, and fine motor in kindergarten, and a statistically significant higher rate of school attendance than comparison children. Fourth grade CSAP scores in reading and writing also showed higher mean performance levels for HIPPY children as compared to non-HIPPY children. In 5th grade, HIPPY children continued to show higher mean scores in all areas, with statistically significant differences in reading, math, and social studies.

Colorado Home Intervention Program (CHIP)

Overview

The Colorado Home Intervention Program (CHIP) provides in-home, family-centered early intervention services to children who are deaf or hard of hearing and their families, from birth to age three. CHIP resides within the Colorado School for the Deaf and the Blind and has been in existence for 40 years. The program is statewide and utilizes regional coordinators who are community-based and responsible for training and mentoring the early interventionists in their area, locating providers, systemically connecting with local agencies who may offer services for families, providing technical assistance, and representing CHIP on local Inter-agency coordinating councils.

Home visits are conducted by a masters-prepared early interventionist, and are typically one hour in length, with the frequency varying from one to four times per month depending on the need. The program utilizes a data-driven approach beginning with a comprehensive assessment of the child's development at established six- month intervals, beginning at 9 months of age. The assessments include parent-response developmental protocols and a videotaped language sample. Child outcomes are measured in the areas of language development, speech, auditory skills, cognition, symbolic play, and general development. Parent outcomes are examined in terms of the parents' use of language including the facilitation of communication strategies and development of sign language skills. A formalized needs assessment is also conducted with the family at regular intervals and the results used to monitor the child's and family's progress, as well as to plan goals and strategies for the child's intervention services. These data drive decisions by the family and providers about the level of intervention required, effectiveness of communication method being used, and the need for additional services.[33]

Eligibility

The Colorado Home Intervention Program is available to all families in the state with a child, birth to age three, who is deaf or hard- of- hearing regardless of income level.

Demographics

In 2010, the program serves more than 350 children statewide. Because families are served regardless of income level, the demographics mirror that of the state, with a significant number classified as English Language Learners. Approximately 40 percent of children have multiple disabilities, and all are considered to be at-risk for developmental delays due to hearing loss.[34]

Ability to Meet the Needs of Families

The program utilizes a family-centered approach by helping the family identify goals and then providing supports to achieve these goals. The early interventionist provides technical information as well as emotional support as the family learns about their child's hearing loss. Interventionists make an effort to identify the unique dynamics between family members, in order to provide information in a manner which is receptive. A significant number of families are classified as English Language Learners and services are provided in the language of the home. In terms of early identification and intervention, CHIP has established collaborative relationships with other service providers around the state, which has lead to Colorado exceeding the standard of intervention by 6 months, with the average age being less than 3 months. [35]

[33] Dinah Beams, MA, CED, Program Coordinator Colorado Home Intervention Program (CHIP)
[34] Ibid.
[35] Ibid.

Colorado Programs

All communities and counties in the state are served. The program utilizes a system of nine regional coordinators who are responsible for training and mentoring the early interventionists in their area. Figure 18 illustrates the counties in each region and the 2010 caseload.

FIGURE 18:

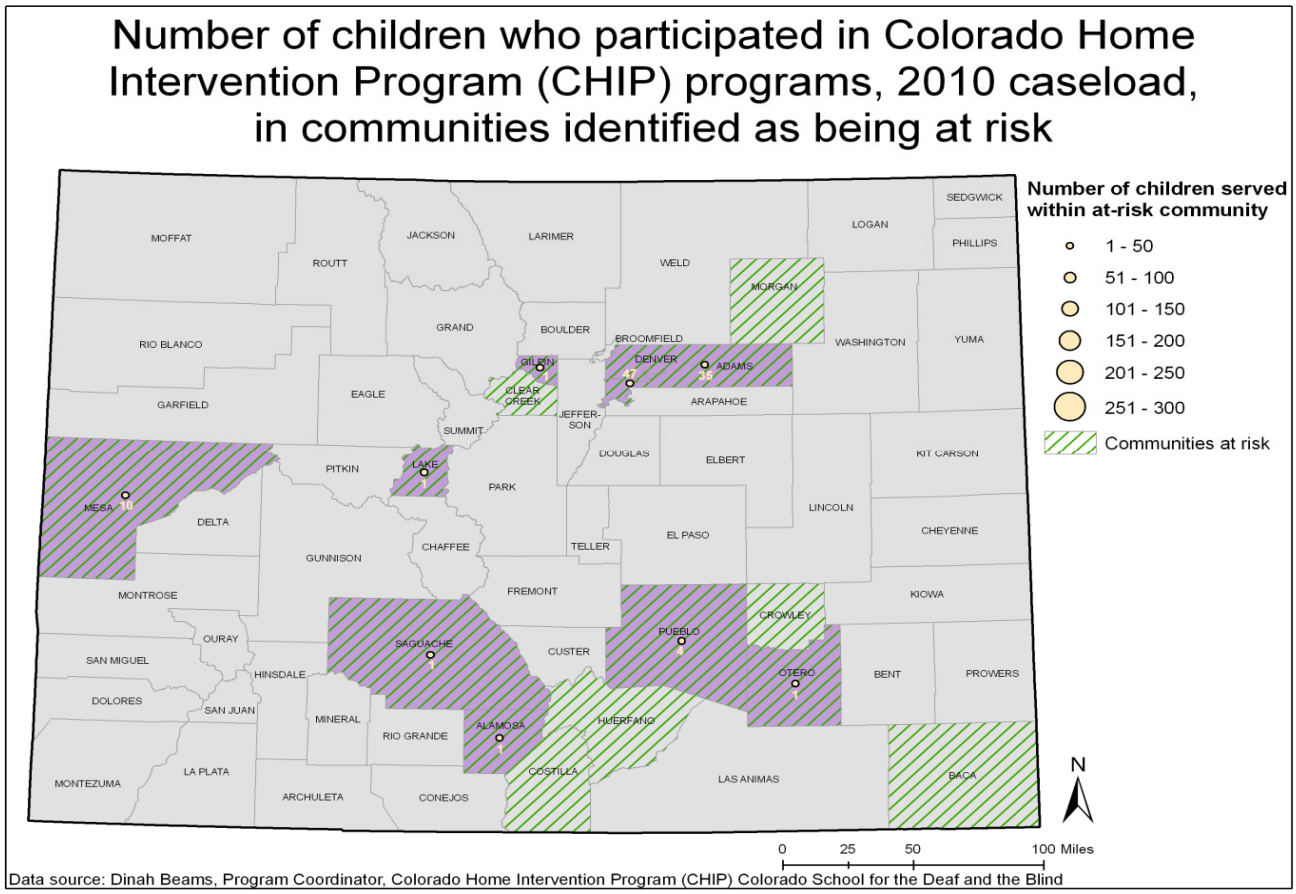
Number of Families Served by CHIP, 2010 Caseload, by Region and Colorado County

Counties Covered by Region		# Families Served
Clear Creek Gilpin	Jefferson Summit	45
Baca Bent Chaffee Cheyenne Crowley Custer Elbert El Paso Fremont Teller	Huerfano Kiowa Kit Carson Las Animas Lincoln Otero Park Prowers Pueblo	31
Adams	Denver	90
Larimer Logan Morgan Phillips	Washington Weld Yuma Sedgwick	36
Alamosa Hinsdale Ouray Conejos Delta Saguache	Mineral Gunnison Costilla Montrose Rio Grande San Miguel	8
Archuleta Dolores La Plata	San Juan Montezuma	6
Arapahoe	Douglas	57
Boulder	Broomfield	24
Eagle Garfield Grand Jackson Lake	Pitkin Moffat Mesa Rio Grande Routt	26

Resources in "At-Risk" Communities

For the purposes of this needs assessment, 15 counties have been defined as "at-risk" communities including: Denver, Adams, Clear Creek, Gilpin, Lake, Alamosa, Saguache, Mesa, Pueblo, Crowley, Morgan, Otero, Baca, Costilla, and Huerfano. Figure 19 displays the 2010 case load for CHIP programs in counties "at-risk."

FIGURE 19.



Quality Assurance[36]

1. PROGRAM STANDARDS: The national Early Hearing Detection and Intervention (EHDI) initiative has established standards for identification and intervention for children with hearing loss. Standards include: screening by 1 month of age, identification by 3 months of age, and intervention by 6 months of age. Colorado exceeds the standard for intervention by 6 months.

2. REQUIRED STAFF QUALIFICATIONS: All early interventionists have master's degrees in education of the deaf/hard of hearing, speech/language pathology, and /or audiology. In addition, licensure or certification in one or more of these areas is required.

[36] Dinah Beams, MA, CED, Program Coordinator Colorado Home Intervention Program (CHIP)

3. TECHNICAL ASSISTANCE: The program offers ongoing in-service training to providers, as well as one-on-one mentoring by lead providers based on the providers' expressed needs, and on areas targeted for improvement based on child and family outcome data. Provider training is tracked and needs evaluated.

4. EVALUATION OF QUALITY AND PROGRAM OUTCOMES: The program utilizes data to ensure high quality service delivery and for continuous quality improvement efforts. The CHIP program is linked to the University of Colorado-Boulder Speech, Language, and Hearing Sciences Department that coordinates and analyzes all program evaluation measures: parent surveys measure program utilization and satisfaction; provider surveys measure continuing education obtained and needed; and multi-disciplinary measures of child and family outcomes are also assessed. Additionally evaluation data are also used to identify areas of program strengths and needs for improvement.

   Both cross-sectional designs and longitudinal growth models are used to examine outcomes on an annual basis. Regression models are applied to determine which factors contribute significantly to better child outcomes and increased growth rates over time. Each year, the proportion of children whose abilities fall within and below the average range are determined. The most recent analysis of the language data (2009) indicates that 76% of the children in the program have language skills that fall within the average range, with an additional 10% of the children falling in the borderline average range. Earlier identification of hearing loss and cognitive ability are powerful predictors of language outcomes. Evaluation results are presented to the CHIP Accountability Committee who is responsible for overseeing program quality and effectiveness. Program improvement goals are then established and articulated in both a strategic plan and a school-wide plan. These are annually reviewed and progress reports presented to the Board of Trustees

<u>Evaluation and Outcomes:</u>

CHILD ABUSE/NEGLECT

- Prevention of child injuries, child abuse, neglect or maltreatment and reduced emergency room visits – Childhood deafness traditionally results in significant communication delays and barriers. These lead to frustration on the part of both the parent and the child increasing the risk for both neglect and abuse. Two of the primary goals of CHIP are to improve child communication skill and to enhance parent-child interaction. Both of these are systematically evaluated at six- month intervals via developmental questionnaires, videotape sampling, and direct administration of standardized tests.

SCHOOL READINESS & ACHIEVEMENT

- Improvements in school readiness and achievement – Research in language and deafness repeatedly has shown that the strongest predictor of later language and literacy is early (i.e., at age 3) language skills. CHIP is dedicated to supporting all families and children to reach their full communication and developmental potential, including the achievement of language abilities that are commensurate with cognitive skills. By establishing age-appropriate language abilities from birth to age 3 (currently this is achieved by 76% of the children in the program), children arrive at school ready to achieve academically alongside their age-level peers. The most recent analysis (2009) of the expressive language of children in the CHIP program with normal cognitive abilities revealed a median language quotient of 99 (relative to a median of 100 in a normative sample of children with normal hearing).

COORDINATION OF AND REFERRAL TO SERVICES

- Improvements in the coordination and referral for other community resources and supports CHIP home visits focus on identifying and addressing child and family needs. These are measured regularly and systematically using the Family Needs Assessment. Many of the issues identified on this assessment tool, necessitate the identification of and referral to community resources and supports outside the CHIP program. CHIP providers frequently make these referrals, guiding the family through the process of contacting other agencies and professionals and often accompanying them on their first visits to other supports. Analysis of the Family Needs Assessment over time has indicated that the number of parent-perceived "needs" decreases as time in the CHIP program increases.

CHILD HEALTH AND DEVELOPMENT

- Improvements in child health and development, including the prevention of child injuries and maltreatment and improvements in cognitive, language, social-emotional, and physical developmental indicators have been noted.

IMPROVEMENTS IN PARENTING SKILLS

- CHIP is a family-centered program and, as such, focuses on enhancing parents' skills. One of the parent skills that is systematically evaluated in those families who have chosen to incorporate sign language in their daily communication is their knowledge and use of signs. From the first to the second year in the program, on average, parents' increase their sign vocabulary more than two-fold. From the second to the third year in the program, they demonstrate an average increase in sign vocabulary of 45%. Parent interaction/ communication skills are measured at 6 month intervals by transcribing both the child's and the parent's language during a free-play interaction. Diversity of vocabulary use as well as average sentence length is calculated and analyzed for its appropriateness relative to the child's current language skills.

Nurse-Family Partnership (NFP)

Overview

The Nurse-family Partnership (NFP) is an evidence-based nurse home visitation model that targets low-income, first-time mothers and their children. The NFP National Service Office is located in Denver, Colorado, and NFP operates programs in 32 states. The model is based on 30 years of research, founded on the work of Dr. David Olds, Professor of Pediatrics, Psychiatry, and Preventive Medicine at the University of Colorado at Denver. The program was first disseminated to local communities in 1996, after being tested in randomized control trials, which is the most scientifically-rigorous type of research methodology used in the evaluation of health and human service programs.[37] These trials demonstrated that NFP participants had improved pregnancy outcomes, improved child health and development, and that families are more likely to attain economic self-sufficiency.[38]

The NFP serves low income, first-time mothers. The client enrolls voluntarily by the 28th week of pregnancy. Home visits continue up until the child's second birthday and the average number of visits for families served

[37] "How Nurse-Family Partnership Fits the Federal Statutory Requirements: NFP program overview and qualifications for federal funding," Nurse Home Visitation National Program Center, August 2010

[38] NFP National Service Office website: http://nursefamilypartnership.org

in Colorado is nearly 28 per client.[39,40] Home visits are delivered by registered nurses, and on average, last 70 minutes. During the pregnancy phase of the program, the client's health is the primary concern. After birth, the focus shifts to parenting through development of the maternal role. Nurses assess readiness for parenthood and help the mother identify family and other social supports. WIC and Medicaid comprise the most frequent type of referrals made to program participants.[41]

The focus of each home visit is mutually determined by the client and nurse home visitor at the preceding visit to allow for individualization related to the family's needs. The content of the home visitation program is based upon guidelines that are designed to promote knowledge and skills in the five domains of maternal, child, and family functioning:

- Personal health of the client
- Environmental health
- Client's life-course development
- Maternal role
- Relationships with friends and family

Nurses concentrate on these domains depending on the developmental stages and challenges that families frequently encounter during pregnancy, infancy (0 to 12 months), and toddlerhood (13 to 24 months).[42]

Eligibility

According to national program standards, participants must be first- time mothers with low incomes, which is defined at the state level. In Colorado, the state statute, the Nurse Home Visitor Act, that provides home visitation funding, defines low-income as 200 percent of the federal poverty level (FPL). Colorado statute allows the state-funded NFP programs to enroll women up to the end of the first month of the baby's life, which is a departure from the national program objective of 28 weeks.

Colorado Program

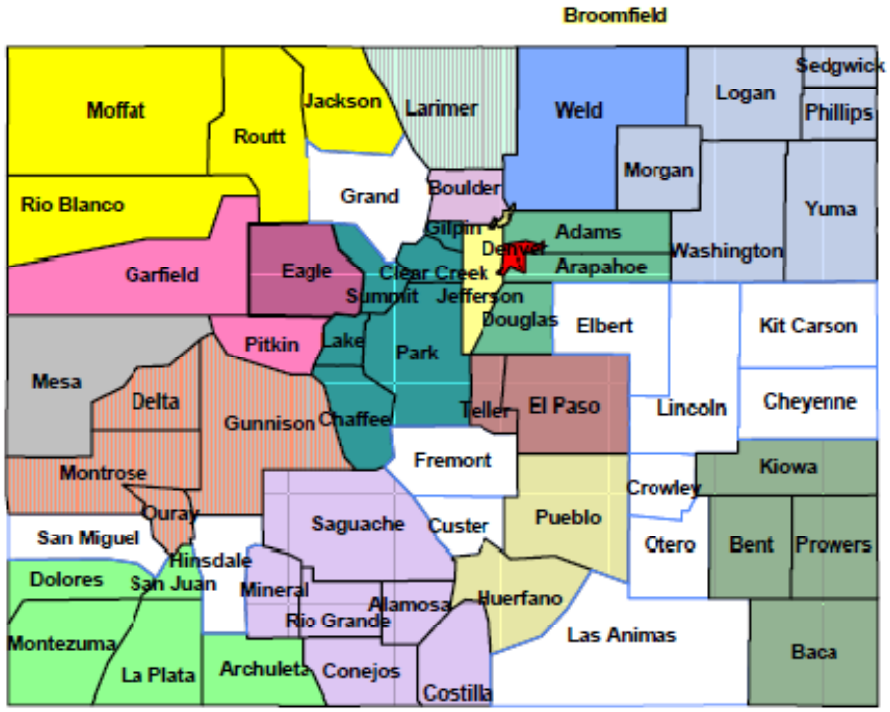
In Colorado, Nurse-Family Partnership program funding is appropriated as outlined in statute in the Nurse Home Visitor Act. This statute directs a portion of the state's master tobacco settlement dollars to the program. Local grants are administered by the Colorado Department of Public Health and Environment (CDPHE), and the program is managed by a four partnering agencies including CDPHE; the National Center for Children, Families and Communities at the University of Colorado at Denver Health Sciences Center; the NFP National Service Office; and Invest in Kids, a statewide non-profit organization. This team is referred to as the Colorado Nurse-Family Partnership Coordination Team.

There are 19 local Nurse-Family Partnership programs operating around the state, serving 52 of Colorado's 64 counties. Since program inception through June 2010, approximately 12,422 families have been served in Colorado. Figure 20 provides a map of Colorado, with the name of the program, the number of families served and the region served during state FY2009/2010.

[39] Note: Colorado Statute and Rules allow state-funded NFP programs to enroll women up to the end of the first month of the baby's life, which is a departure from the national program objective of 28 weeks.
[40] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009
[41] Ibid
[42] NFP National Service Office website: http://nursefamilypartnership.org

FIGURE 20

Nurse-Family Partnership
Colorado Nurse Home Visitor Program
FY09/10



- Southwest Colorado NFP Serves: 108 families (San Juan Basin Health Dept.)
- Non-Funded
- Northwest Colorado NFP Serves: 50 families (Northwest Colorado Visiting Nurse Assn.)
- Family Visitor NFP Serves: 100 families (only Basalt/El Jebel area of Eagle County served)
- San Luis Valley NFP Serves: 125 families (Valley-Wide Health Services, Inc.)
- Eagle County NFP Serves: 50 families (Eagle County Health & Human Services)
- Intermountain NFP Serves: 157 families (Summit County Public Health Nursing)
- Boulder County NFP Serves: 100 families (Boulder County Health Dept.)
- Jefferson County NFP Serves: 200 families (Jefferson County DOPHE)
- El Paso County NFP Serves: 300 families (El Paso County Health Dept.)
- Pueblo County NFP Serves: 125 families (Pueblo Community Health Center)
- Tri-County NFP Serves: 250 families (Tri-County Health Dept.)
- Denver County NFP Serves: 100 families (Denver Health through Best Babies Initiative)
- Weld County NFP Serves: 150 families (Weld County DOPHE)
- Northeast Colorado NFP Serves: 50 families (Northeast Colorado Health Dept.)
- Southeast Colorado NFP Serves: 50 families (Prowers County Public Health Nursing Service)
- Mesa County NFP Serves: 200 families (Mesa County Health Dept.)
- Larimer County NFP Serves: 200 families (Larimer County DOPHE)
- Region 10 NFP Serves: 75 families (Montrose County Health & Human Services)

*St. Anthony's Health Foundation serves 200 in Adams, Denver and Jefferson Counties

Figure 21 provides information on Colorado NFP programs,[43] and includes the number of clients served, plus the number of clients projected to need services, based on a formula (see footnote).[44] In a few instances, actual referral lists were utilized in place of the 50 percent reach a figure, based upon the agency's experience. Expansion projections may require adding new implementing agencies in some regions, dependent on current agency's capacity for expansion.[45]

FIGURE 21

Colorado NFP Programs, FY 2009-2010: Numbers Served, Projections and Penetration Rates

County (ies)	# Current Clients	Projected # New Clients *(measures the need for services)*	Current Penetration Rate *(# current/# projected clients)*
Las Animas	0	25	0%
Kit Carson, Lincoln, Cheyenne, Elbert	0	50	0%
Fremont, Custer	0	50	0%
Grand	0	25	0%
Denver	100	400	25%
Adams, Arapahoe	300	1200	25%
Denver, Jefferson, Adams	200	400	50%
Boulder	100	175	57%
Mesa	200	300	67%
Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache	125	175	71%
El Paso	300	400	75%
Routt, Moffat, Jackson, Rio Blanco	50	63	79%
Eagle (El Jebel, Basalt), Garfield, Pitkin	100	125	80%
Larimer	200	250	80%
Pueblo, Huerfano	125	150	83%
Weld	150	175	86%
Eagle	50	50	100%
Summit, Lake, Gilpin, Park, Clear Creek, Chafee	157	157	100%
Jefferson, Broomfield	200	200	100%
Logan, Morgan, Phillips, Sedgwick, Washington, Yuma	50	50	100%
Montrose, Delta, Gunnison, Ouray	75	75	100%
Prowers, Baca, Bent, Kiowa	50	50	100%
San Juan, La Plata, Archuleta, Montezuma, Dolores	108	108	100%
Total	**2640**	**4653**	**57%**

[43] Note: Fremont and Custer counties have indicated they have no interest in adding NFP to their existing continuum of services, so they are not included in total additional families to be served

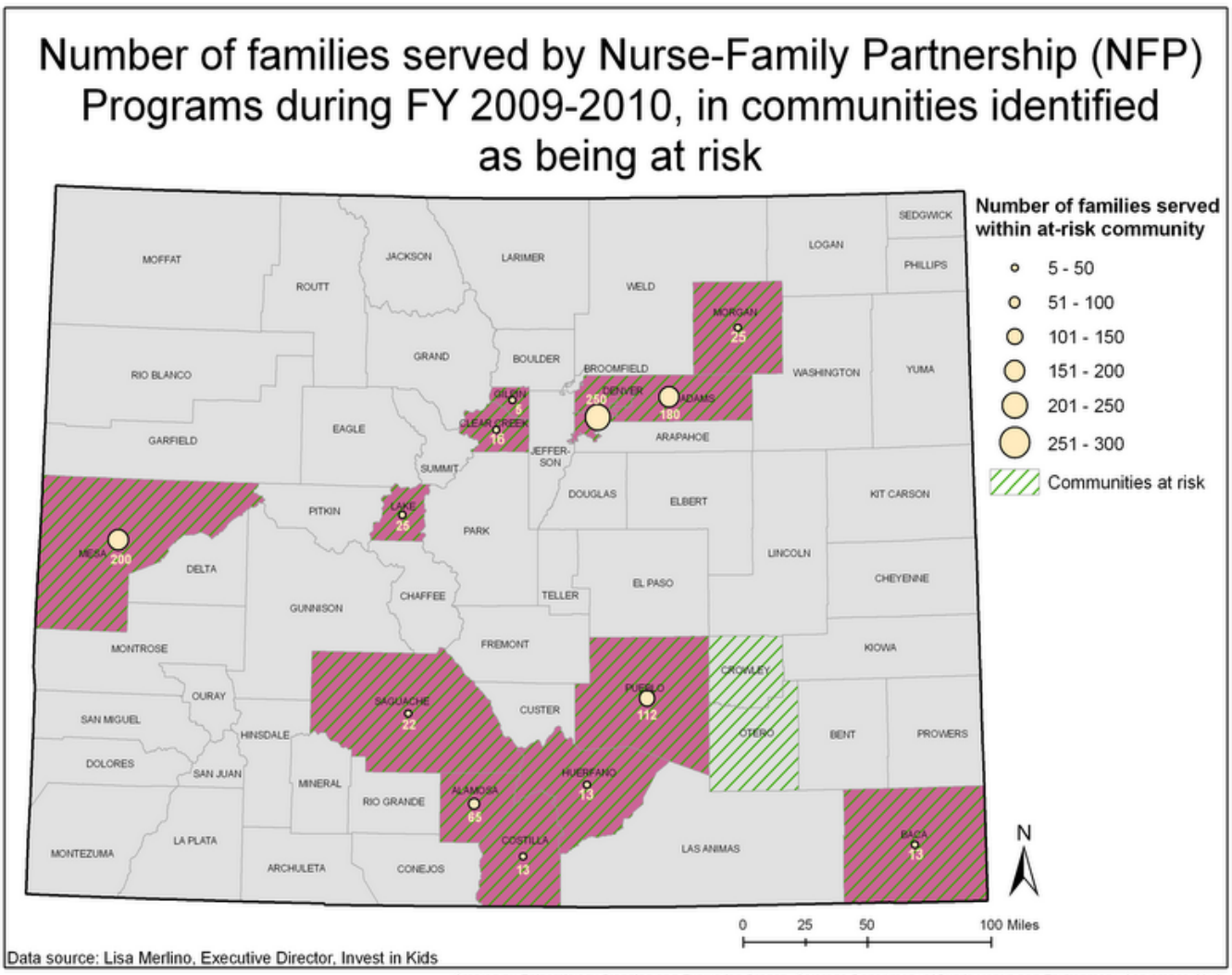
[44] Note: Projections were calculated by a formula utilizing assumptions about capacity and likelihood of participation, and considered the number of first time, low-income births annually by county.

[45] Invest In Kids

Resources in "At-risk" Communities

For the purposes of this needs assessment, 15 counties have been defined as "at-risk" communities including: Denver, Adams, Clear Creek, Gilpin, Lake, Alamosa, Saguache, Mesa, Pueblo, Crowley, Morgan, Otero, Baca, Costilla, and Huerfano. Figure 22 displays the NFP programs located within these communities and the number of families served during FY 2009-2010.

FIGURE 22



Demographics

Since the inception of the program in 2000 through October 2009, Colorado NFP programs have served 11,030 clients. During FY 2009-2010, the number of clients served was 2,390. Figures 23 and 24 provide the age and race/ethnicity of mothers at program intake, since program inception. The majority of mothers served range in age from 15 to 24 years, with an average age of 19. In terms of race/ethnicity, the majority of mothers are Hispanic (47percent), followed by White/non-Hispanic (40 percent).[46]

Figure 23: Percentage of Mothers in Each Age Category at Time of Intake, Colorado, January 2000 - June 2009

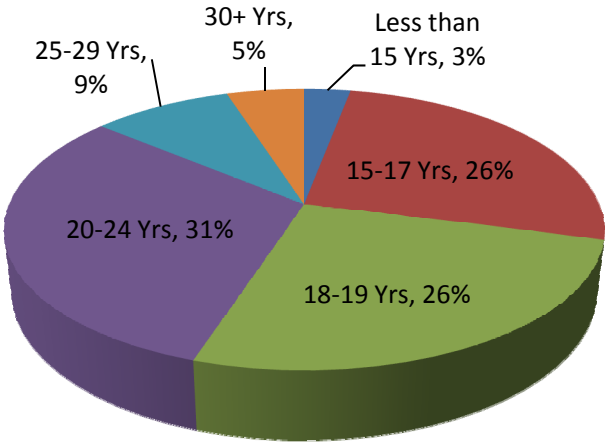
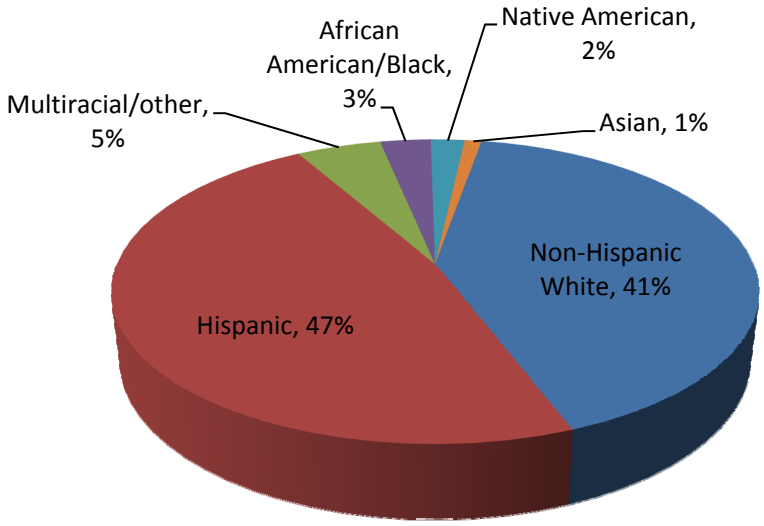


Figure 24: Race/Ethnicity of Mother at Program Intake Colorado, January 2000 - June 2009



[46] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009

The primary language of many of Colorado's NFP clients is Spanish, more so than the proportion of Spanish-speaking clients in NFP programs nationally. Figure 25 lists the percentage of NFP mothers by primary language spoken, for both Colorado and national NFP programs.[47]

FIGURE 25: Primary Language of NFP Mothers at Intake
Colorado and National NFP, October 2006-December 2008

Language	Colorado NFP	National NFP
English	76%	85%
Spanish	22%	13%
Other	2%	2%

Fatherhood

Clients are asked at intake to report on the status of the child's biological father. This information is presented in Figure 26.[48] In 95 percent of cases, the women's current partner is the biological father and 71 percent of mothers have daily contact with this individual.

FIGURE 26:
Role of Biological Father, Colorado NFP and National NFP, January 2000- June 2009

	Colorado NFP	National NFP
Current partner is biological father (n=8017)	95%	93%
Average amt. of money from biological father per month (n=9750)	$355	$265
Contact with biological father (n=9969)		
Not at All	13%	12%
Less than once a week	6%	7%
At least once a week	9%	10%
Daily	71%	71%

Note: Sample sizes presented are for CO NFP

Client Risk Factors

Since the beginning of Colorado's program tracking (January 2000) through October 2009, 80 percent of NFP mothers are unmarried; 63 percent have been unemployed, with an average household income of $13,500 (information was gathered at intake). In addition, while 67 percent of mothers ages18 and older received their high school diploma or completed a GED, 33 percent had not. In terms of government assistance, 70 percent were already enrolled in the WIC and Medicaid programs, 11 percent had qualified for food stamps and 3 percent for Temporary Assistance for Needy Families (TANF). Only 32 percent of mothers had reported ever working.[49]

[47] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009
[48] Ibid.
[49] ibid.

Figure 27 notes the percentage of women in the Colorado NFP program who report types of physical, emotional, or sexual abuse, during intake as compared to their national program counterparts: [50]

FIGURE 27: Percentage of Mothers Reporting Abuse at Intake
Colorado NFP and National NFP Programs, January 2000-June 2009

Type of Abuse	Colorado NFP	National NFP
History of physical or emotional abuse	33%	29%
Physical abuse in past year	13%	15%
Currently afraid of partner or someone else	8%	6%
Physical abuse during pregnancy	5%	6%
Forced sex in the past year	3%	3%

Ability to Meet Family Needs

1. Colorado's NFP programs are successful in reaching the intended population of low-income, first-time clients for the program:
   - 75% of eligible referrals are enrolled in the program
   - 100% of enrolled women are first-time clients (no previous live birth)
   - 60% of pregnant women are enrolled by 16 weeks gestation or earlier

2. The program focuses on client-centered care and the individualization of program content to the client's life situation. The nurse's assessment of each client takes into account physical and mental health factors, as well as social support and educational level, as seen from the client's cultural perspective. A plan of care is mutually developed with the client using the NFP curriculum as a guide. The nurse uses her professional nursing judgment to tailor the program to the individual needs of each client, which are determined in the course of forming a therapeutic relationship.

3. Reflective communication and motivational interviewing are used by nurses to assure culturally sensitive care and establish trust and respect.

4. The NFP focuses on helping clients achieve life course development goals by promoting the planning of future pregnancies, completion of education, procurement of employment, and development of stable partner relationships. Colorado program evaluations show an increase in the percentage of NFP participants who work, marry and demonstrate completion of educational goals between intake and two years postpartum.

5. One of the strengths of the Nurse-Family Partnership program lies in the intensity and duration of the intervention. Program guidelines prescribe a certain schedule of visits that a client should receive. On average, Colorado NFP clients received a higher percentage of those visits as compared to national NFP clients. Pregnant women are followed until their child is two years of age, by the same nurse when possible, which facilitates relationship development, learning parenting skills, linkages to services, and emotional support.

[50] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009

6. For clients who do not speak English, the NFP has many bicultural/bilingual nurses who speak Spanish, as the curriculum is available in Spanish. In addition, all sites have access to interpreters who can accompany nurses on home visits to assist with the communication needs of clients. Nurses have been successful not only with Spanish speaking clients, but also with clients from China, Africa, Russia, Vietnam, and Laos, as well as with those who may be visually or hearing impaired. When interpreters are accessed to support client's whose primary language is different from the nurse, the National Standards of Practice for Interpreters in Health Care[51] serve as a guide to implementing agencies.

7. Colorado's programs strive to retain clients through child's second birthday. Cumulative program attrition is 40 percent or less. Colorado's figures by developmental stage are similar to national NFP program figures:
    - Pregnancy: 13.9% (15.8% national NFP)
    - Infancy: 32.6% (31.5% national NFP)
    - Toddlerhood: 16.2% (15.4% national NFP)

    The two main reasons cited for attrition are 1) client moved out of service area or 2) client was unable to be located. [52]

Quality Assurance

The Nurse-Family Partnership National Service Office (NFPNSO), a national non-profit, was established in 2003 to facilitate quality replication of the Nurse-Family Partnership program across the U.S. and to provide implementing agencies with ongoing support in nursing education and practice, program quality assurance, marketing, and public policy. In Colorado, Invest in Kids (IIK), a non-profit founded in 1999, works collaboratively with the NFPNSO to implement the program throughout the state by providing intensive technical assistance to service delivery sties.

PROGRAM FIDELITY: A key component of program success lies in assuring that the Nurse-Family Partnership model is implemented with fidelity, a core responsibility of both the NFPNSO and Invest In Kids, in Colorado. This begins with an NFPNSO requirement that communities assess capacity and readiness before the community receives permission to implement the model. Next, the Nurse-Family Partnership has objectives to guide implementing agencies in tracking their fidelity and monitoring program outcomes related to standard indicators around maternal, child, and family functioning. The objectives have been drawn from the NFP's research trials, early dissemination experiences, and current national health statistics (e.g., National Center for Health Statistics, Centers for Disease Control and Prevention; Healthy People 2010). The objectives are intended to provide guidance for quality improvement efforts and are long-term targets for implementing agencies to achieve over time.[53]

Nurse home visitors and nurse supervisors complete core educational requirements specified by the NFPNSO, in order to assure that the model is implemented with fidelity. Upon implementation, the nurse utilizes detailed visit-by-visit protocols, guidelines and the theoretical framework to guide their work.[54, 55]

[51] National Council on Interpreting in Health Care, Inc., National Standards of Practice for Interpreters in Health Care, September 2005, www.ncihc.org
[52] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009
[53] NFP National Service Office website: http://nursefamilypartnership.org
[54] Ibid.
[55] NFP National Service Office website: http://nursefamilypartnership.org

Finally, in Colorado, the Nurse Home Visitor Act, also assures that program standards are met by requiring an annual review process, which includes a program evaluation report, upon which funding recommendations are made. There is also language in statute that specifically requires the "provision of programmatic and clinical support, evaluation, and monitoring for the program, including nurse practice support and training, clinical and programmatic technical assistance, compliance monitoring and support, program development and implementation support, and performance improvement monitoring and support." [56]

STAFF QUALIFICATIONS: The Nurse-Family Partnership (NFP) employs only registered nurses, most of whom have a baccalaureate degree, and requires standard educational preparation, along with on-going continuing education focused on cultural sensitivity, health disparities, reflective communication and motivational interviewing, along with other relevant topics pertinent to maternal/child nursing.[57]

PROGRAM STANDARDS: The NFP employs stringent program standards for implementing agencies. For example, as a standard, the nurse must work at least half-time, in order to become a content expert. A full-time nurse home visitor carries a caseload of no more than 25 active clients. A full-time nurse supervisor provides supervision to no more than eight individual nurse home visitors. Nurse supervisors provide oversight through specific supervisory activities including one-on-one clinical supervision, case conferences, team meetings, and field supervision.

TECHNICAL ASSISTANCE: Implementing agencies receive training on the model's structure, elements, standards, and expectations for adhering to the model, as a significant part of pre-implementation and ongoing implementation support. Additionally, nursing support and ongoing program consultation are provided in order to develop nurse and agency capacity to implement the program as intended.

Evaluation of Quality and Program Outcomes

Data from all home visits are continuously collected from NFP-implementing agencies through the NFPNSO web-based Clinical Information System (CIS). These data are analyzed and returned to local Nurse-Family Partnership agencies to provide them with information on their progress toward meeting benchmarks in improving maternal and child health. Data monitoring occurs at both a process level (implementation fidelity) as well as a client outcome level (program outcomes). Data from the longitudinal research on the program as well as ongoing implementation are utilized to set benchmarks for performance. NFP staff continually review national trends emerging from CIS data, as well as changes in national indicators of relevant maternal, child, and family functioning, to identify areas where the model's objectives may need to be modified. Local agencies also influence this process by providing information about their experience in working with the objectives.[58,59]

The scientific studies used to determine Nurse-Family Partnership's effectiveness demonstrate a wide range of significant and reliable outcomes. Findings from three randomized controlled trials serving urban and rural populations including African-American, Hispanic, and Caucasian families living in poverty, demonstrate that Nurse-Family Partnership consistently:

[56] Heidi McCaslin, Community Outreach Director, Invest in Kids
[57] Lisa Merlino, Executive Director, Invest in Kids
[58] "How Nurse-Family Partnership Fits the Federal Statutory Requirements: NFP program overview and qualifications for federal funding," Nurse Home Visitation National Program Center, August 2010
[59] State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009

- improves prenatal health;
- reduces childhood injuries, particularly those suggestive of child maltreatment;
- reduces the rates of subsequent pregnancies and births;
- increases the intervals between first and second pregnancies and births;
- increases maternal employment;
- reduces women's use of welfare;
- reduces children's mental health problems;
- increases children's school readiness and academic achievement;
- reduces costs to government and society; and
- is most effective for those most susceptible to the problems examined.[60]

According to the September 2009 NFP Evaluation Report, Colorado NFP has achieved statistically significant reductions in the following health areas:

- Smoking during pregnancy
- Marijuana use during pregnancy
- Alcohol use during pregnancy
- Experience of violence during pregnancy[61]

Early Head Start (EHS)

The U.S Department of Health and Human Services, Administration on Children, Youth and Families (ACYF) initiated the Early Head Start program in response to the 1994 Head Start reauthorization, which established a special initiative for services to families with infants and toddlers. Head Start had a long history of providing services to infants and toddlers and advances in the field of infant development influenced Head Start to expand its programs and include the provision of Early Head Start.[62]

The comprehensive, two-generation program includes intensive services that begin before the child is born and concentrate on enhancing the child's development and supporting the family during the critical first three years of the child's life.[63] Early Head Start (EHS) is community-based, and serves low-income pregnant women and families with infants and toddlers. Since its inception, Early Head Start has grown to over 700 programs serving over 70,000 children and families around the country. The mission of Early Head Start is to:

- Promote healthy prenatal outcomes for pregnant women;
- Enhance the development of very young children; and
- Promote healthy family functioning.[64]

The framework of the Early Head Start program includes four cornerstones: Child Development, Family Development, Community Building and Staff Development. The following was taken from the Early Head Start National Resource Center's website.[65]

[60] "How Nurse-Family Partnership Fits the Federal Statutory Requirements: NFP program overview and qualifications for federal funding," Nurse Home Visitation National Program Center, August 2010
[61] "State of Colorado, Nurse-Family Partnership Evaluation Report 9: Program Initiation (January 2, 2000) through June 30, 2009," Nurse-Family Partnership National Program Office, September 1, 2009
[62] US Department of Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation, website: http://www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/ehs_aboutus.html
[63] Ibid.
[64] US Department of Human Services, Administration for Children and Families, Early Head Start National Resource Center, website: www.ehsnrc.org/AboutUs/ehs.htm

1. CHILD DEVELOPMENT: Programs must support the physical, social, emotional, cognitive, and language development of each child, including parenting education; support of a positive parent-child relationship is critical to this cornerstone. The services that programs must provide directly or through referral include:
    - Early education services in a range of developmentally appropriate settings;
    - Home-visits, especially for families with newborns;
    - Parent education and parent-child activities;
    - Comprehensive health and mental health services; and
    - High quality child care services, provided directly or in collaboration with a community child care provider."

2. FAMILY DEVELOPMENT: "Programs must seek to empower families by developing goals for themselves and their children. Staff and parents develop individualized family development plans that focus on the child's developmental needs and the family's social and economic needs. Families that are involved in other programs requiring a family service plan will receive a single coordinated plan so that they experience a seamless system of services. The services that programs must provide directly or through referral include:
    - Child development information;
    - Comprehensive health and mental health services, including smoking cessation and substance abuse treatment;
    - Adult education, literacy, and job skills training to facilitate family self-sufficiency;
    - Assistance in obtaining income support, safe housing, or emergency cash; and
    - Transportation to program services."

3. COMMUNITY BUILDING: "Programs are expected to conduct an assessment of community resources so that they may build a comprehensive network of services and supports for pregnant women and families with young children. The goal of these collaborative relationships is to increase family access to community supports, make the most efficient use of limited resources, and effect system-wide changes to improve the service delivery system for all families in the community."

4. STAFF DEVELOPMENT: "The success of the Early Head Start program rests largely on the quality of the staff. Staff members must have the capacity to develop caring, supportive relationships with both children and families. On-going training, supervision, and mentoring will encompass an inter-disciplinary approach and emphasize relationship-building. Staff development will be grounded in established "best practices" in the areas of child development, family development, and community building." [66]

Eligibility

Each individual Early Head Start program is responsible for determining its' own eligibility criteria. Family income is one key factor and the federal poverty guidelines are used to evaluate family income. Early Head Start programs may elect to target their services to a particular population to best meet the unique needs of families and children in their community.

[65] US Department of Human Services, Administration for Children and Families, Early Head Start National Resource Center, website: www.ehsnrc.org/AboutUs/ehs.html

[66] US Department of Human Services, Administration for Children and Families, Early Head Start National Resource Center, website: www.ehsnrc.org/AboutUs/ehs.htm

Colorado Programs

Colorado has 16 Early Head Start programs that offer home visitation, which are coordinated by the Director of the Head Start State Collaboration, in the Office of the Lt. Governor. In Fiscal Year 2009, Colorado had funded enrollment for 738 Early Head Start children.[67] The curricula used by EHS program vary by community, as does the agency providing the program. Many EHS sites are using Parents as Teachers, Creative Curriculum, and Partners for a Healthy Baby curriculum. EHS programs are delivered by local entities--Head Start agencies, Early Childhood Councils, health and human service agencies, non-profit organizations, school districts and child development centers. Colorado programs, their locations and counties served are provided in Figure 28. Some programs provide regional services to two or more counties. EHS programs located in "at-risk" counties have been highlighted.

FIGURE 28:
Colorado Early Head Start Programs, 2010

Program Name	Agency Location	Counties Served
Catholic Charities Head Start	Denver	Denver
Clayton Educare	Denver	Denver
CP of Colorado, INC.	Denver	Denver
Family Star EHS	Denver	Denver
Community Partnership for Child Development	Colorado Springs	El Paso
Eagle County Early Head Start	Edwards	Eagle
Early Childhood Council of the San Luis Valley	Alamosa	Alamosa, Saguache, Costilla
Early Children Education RE1 Program	Cripple Creek	Teller
Wild Plum Center For Children & Families	Longmont	Boulder
Otero Jr. College Child Development Services: Head Start, Early Head Start & Migrant	La Junta	Otero, Costilla
Poudre School District	Fort Collins	Poudre
Salida School Dist., Chaffee County	Salida	Chaffee
Southern Ute Head Start/EHS/Tribal	Ignacio	La Plata, Archuleta
Starpoint Early Head Start	Cannon City	Freemont
Summit County Head Start	Dillon	Summit
Ute Mountain Ute Child Development Center	Towac	Montezuma

[67] "Annual Needs Assessment and Strategic Plan," Colorado Head Start State Collaboration Office, December 21, 2009

Colorado Communities "At-risk"

In this assessment, 15 Colorado counties have been defined as being "at-risk." Early Head Start has a presence in Denver and three counties within the San Luis Valley. Figure 29 provides the program name, number of children served during the last fiscal year, and curriculum being used.

FIGURE 29:

Colorado Early Head Start Programs in Counties Defined as being "At-Risk"

Program Name	County	Curriculum	Number Served
Catholic Charities Head Start	Denver	Creative Curriculum	60
Clayton Educare	Denver	PAT	86
CP of Colorado, INC.	Denver	*Not available*	*Not available*
Early Childhood Council of the San Luis Valley	Alamosa Saguache Costilla	PAT	50
Family Star EHS	Denver	PAT	16

Ability to Meet Client needs:

The following are Early Head Start Principals for serving families, taken from the Early Head Start National Resources center website:

1. POSITIVE RELATIONSHIPS AND CONTINUITY*:* Strong positive relationships that continue over time are key elements in a high quality program. These relationships include the child, family, and staff, and recognize the parent-child bond as the child's most significant relationship. Infant and toddler care-giving practices must support child attachment by minimizing the number of different caregivers and supporting long-term care-giving relationships. The relationship between staff and family is based on respect for the child and family's home culture.

2. PARENTAL INVOLVEMENT*:* The Early Head Start initiative supports the highest level of parent involvement and partnership. Programs will make a special effort to support the role of fathers in parenting activities. Programs will recognize the parents as the child's primary nurturers and advocates. Parents will also be active participants in policy and decision-making roles.

3. INCLUSION: Programs will welcome and fully include children with disabilities. The individual needs of each child will be evaluated and responded to in a way that builds upon individual strengths. Early Head Start programs have the responsibility to coordinate with programs providing services in accordance with Part C of the Individuals with Disabilities Education Act. Programs will also support the child and family's full participation in community activities.

4. CULTURE: The home culture and language of each family will be supported as an important aspect of early identity formation. Programs will also explore the role of culture and language in child and family development, and community values and attitudes.

5. COMPREHENSIVENESS, FLEXIBILITY, RESPONSIVENESS, AND INTENSITY: Program services are grounded in the belief that all families can identify their own needs and strengths, set their own goals, and are capable of growth. Thus, programs must maintain the flexibility to respond with varying levels of intensity based on families' needs and resources.

6. TRANSITIONS: Programs are responsible for facilitating a smooth transition from Early Head Start into Head Start or other high quality programs and support services. A smooth transition is important to ensure each child continues to receive enriching early child development services and each family continues to receive the support services necessary to healthy family development.

5. COLLABORATION: Collaboration with local community agencies and service providers will maximize the resources available to families with young children in a cost-efficient and comprehensive manner. Early Head Start programs, with the recognition that no one program can meet all of a child and family's needs, will seek to build strong alliances within the communities in which they operate.

Quality Assurance

The first of nine Early Head Start principals is to have a high quality program model. The principal states that individual programs "will develop policies and practices that are founded in the knowledge, skills, and professional ethics embraced by the fields of child development, family development, and community building." The principal also provides a commitment of support from the Federal government "to ensure program quality includes the training and technical assistance network, the program performance standards, and research and evaluation activities."

The Federal government also provides guidance on the expectations for administration and management: "Early Head Start programs will utilize administration and management practices which uphold the nine principles and four cornerstones set forth in the Early Head Start initiative. An interdisciplinary approach will ensure that all staff are cross-trained in the areas of child development, family development, and community building. Staff supervision, with opportunities for feedback and reflection, will emphasize relationship-building as the foundation for interactions between children, families, and staff members."

In terms of continuous quality improvement, on-going training and technical assistance is provided by the Infant/Family Network and the EHS National Resource Center that focus monitoring, research, and evaluation to enable Early Head Start programs to better meet the needs of young children and families.

Evaluation and Program Outcomes:

The Early Head Start Research and Evaluation Project, is a rigorous, large-scale, random-assignment evaluation of Early Head Start, which began in 1996 and continues today. Two EHS programs from Denver have been involved in the research. The Research and Evaluation project was funded in three waves.

1. Birth-to-Three Phase (1996-2001): In an effort to measure program effectiveness, processes, and efficacy of the program, the Congressionally-mandated Birth to Three Phase (1996-2001) included a cross-site national study that encompassed an Impact Evaluation and Implementation Study as well as site-specific research. The Impact and Implementation studies were conducted by Mathematica Policy Research, Inc., and Columbia University's Center for Children and Families, and local work was funded through grants to a university-based team.

    - IMPACT EVALUATION: A rigorous evaluation was designed to examine the impacts of Early Head Start on key child and family outcomes. The evaluation was conducted in 17 sites where Early Head Start research programs were located. The evaluation randomly assigned 3,001 families to participate in either Early Head Start or to be in a control group.

- IMPLEMENTATION STUDY: As part of the national evaluation, a comprehensive implementation study was conducted to measure the extent to which programs implemented the Head Start Program Performance Standards by 1997 and 1999. The study was designed to determine effectiveness of information on program implementation, variations across programs, service quality, service needs, usage by low-income families with infants and toddlers, and program contributions to community change. The assessment results were used to revised Head Start Program Performance Standards

- LOCAL RESEARCH PROJECTS: The local research projects, conducted by university-based researchers were designed to address specific outcomes and program functions that reflected the uniqueness of each Early Head Start program. The major focus for these local studies was the identification of what mediates and moderates positive child and family development within the context of the specific Early Head Start programs and local communities. These local research studies identified site-specific outcomes and examined intra-site differential impacts and their reasons for them.

2. Pre-Kindergarten Follow-up Phase (2001-2005): As part of the longitudinal study, a Pre-Kindergarten Follow-up Phase was conducted by the same local universities funded during the Birth to Three Phase. These universities followed the original children and families from the time they left the Early Head Start program until they entered kindergarten.

3. Elementary School Follow-up (2005-2010): In the Elementary School Follow-Up phase, to again build upon earlier research, children and families from the original study were assessed either during fifth grade or when they had attended their sixth year of formal schooling. Approximately 1,900 children, their parents, and teachers in 17 sites across the U.S. are estimated to have participated. The study includes direct assessments of children's cognitive, socio-emotional, and physical development; parent interviews; teacher questionnaires; and videotaping of maternal-child interactions.

Evaluation Results

The national evaluation has found that 3-year-old Early Head Start children performed significantly better on a range of measures of cognitive, language, and social-emotional development than a randomly assigned control group. In addition, their parents scored significantly higher than control group parents on many aspects of the home environment and parenting behavior. Furthermore, Early Head Start programs had impacts on parents' progress toward self-sufficiency. Early Head Start fathers benefited as well. It should be noted that the researches and EHS websites calls these impacts "generally modest in size," but add that "the pattern of positive findings across a wide range of key domains is promising." In addition, differential program effectiveness provided insight and direction into programs' continuous improvement efforts.[68]

[68] "Research to Practice: Early Head Start Benefits Children and Families," (April 2006), Administration on Children, Youth and Families (ACYF), U.S. Department of Health and Human Services, www.acf.hhs.gov/programs/opre/ehs/ehs_resrch/index.html

SECTION C: State Capacity for Providing Substance Abuse Treatment and Counseling Services to Individuals and Families in Need

Colorado's publicly-funded behavioral health system provides services to Coloradans of all ages who do not have behavioral health insurance coverage or who have Medicaid. Services are delivered through substance use disorder treatment provider networks, Community Mental Health Centers, specialty clinics, state mental health hospitals, individual providers and residential placements. Services are paid for with state fund dollars, federal grant dollars, state and federal Medicaid dollars, local government dollars, client fees, private insurance funds and private donations and grants. This system is monitored by two state agencies: 1) The Department of Human Services, which houses the Division of Behavioral Health; and 2) the Department of Health Care Policy And Financing, which houses the Medicaid program.

Eligibility

Eligibility includes anyone in need of services who is 1) uninsured, or has insurance coverage that does not include mental health or substance abuse benefits; 2) eligible for Medicaid-funded behavioral health services, including the Medicaid fee for service and the capitation programs; and 3) anyone who has Medicare with an income below 300% of the federal poverty level.[69]

Colorado's Public Substance Use Disorder Treatment System

Health and Human Services: The Colorado Department of Human Services, Division of Behavioral Health is both the Mental Health Authority and Substance Abuse Authority for the State of Colorado. The Division focuses primarily on Coloradans who rely on the public sector for access to services for substance use disorders and mental health disorders. For the substance use disorder system the Division contracts for the provision of community prevention, intervention, treatment and recovery services. Modes of service delivery include outpatient, residential, and detoxification services to identified priority populations as outlined in federal and state law. Prevention services are delivered to address individual, family and community needs through evidence-based programs that support the six federally designated prevention strategies.

The Division administers non-Medicaid community substance use disorders treatment for people of all ages, through contracts with 4 designated Managed Service Organizations (MSOs). The MSOs subcontract with 41 treatment providers with 184 sites (funded) in 7 geographical areas (sub-state planning regions) for substance abuse treatment services. Throughout Colorado, the Division licenses 322-substance use disorder treatment providers, that operate 751-substance use disorder treatment sites, and include the 41 MSO-funded providers. The Division regularly reviews licensed substance use disorder treatment providers; adopts standards, rules and regulations; and provides training and technical assistance. The Division also receives and administers federal grants focused on improving services as the state substance abuse authority.[70]

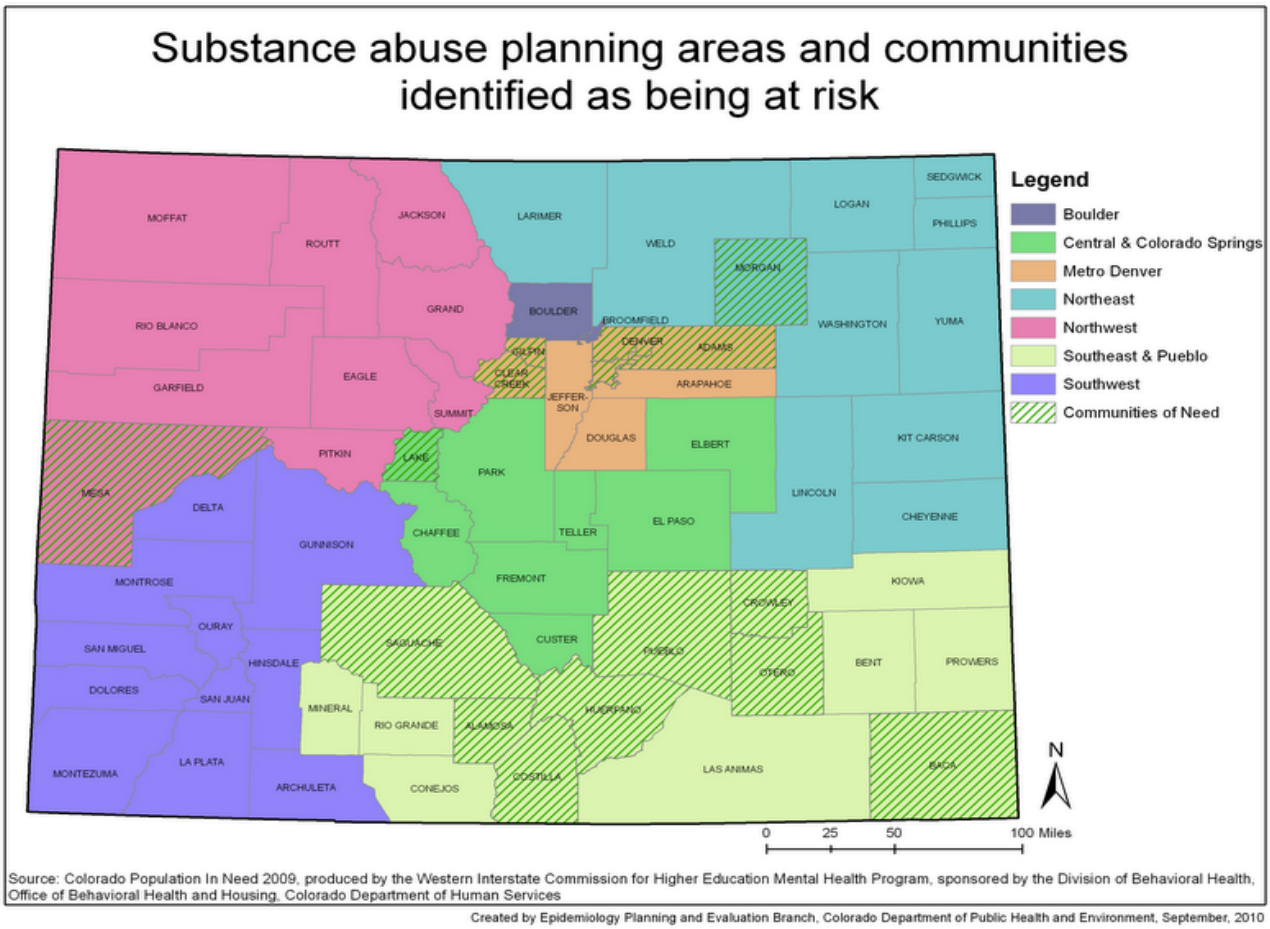
Additionally, the Division oversees and funds the public, non-Medicaid community mental health system. The state is divided into geographic service areas that provide community mental health services. There are 17 community mental health centers (CMHC) who are responsible for providing a comprehensive array of services for the residents of its assigned area, including substance use disorder treatment services. Each specialty clinic serves a defined special population (such as members of an ethnic minority group) and may provide a narrower range of services than a CMHC. The roles and functions of both CMHCs and clinics are

[69] "Mental Health: Colorado Population in Need, 2009," Western Interstate Commission on Higher Education. Sponsored by the Colorado Department of Human Services Office of Behavioral Health and Housing Division of Behavioral Health
[70] Colorado Department of Human Services, Division of Behavioral Health website: www.cdhs.state.co.us/dmh/

statutorily defined in Colorado Revised Statutes C.R.S. 27-66-101 et seq. The Division regularly reviews community mental health programs; adopts standards, rules and regulations; provides training and technical assistance; and responds to complaints from non-Medicaid consumers. The Division also receives and administers federal grants focused on improving services as the state mental health authority. [71]

The State is divided into 7 sub-state substance abuse planning areas (SA Planning Area) and 17 service areas for community mental health (MH Service Area). The SA Planning areas are provided in Figure 30 and include one or more community mental health service areas. Counties identified as being "at-risk" through this assessment have also been included, identified by hash marks on the map.[72]

FIGURE 30



Source: Colorado Population In Need 2009, produced by the Western Interstate Commission for Higher Education Mental Health Program, sponsored by the Division of Behavioral Health, Office of Behavioral Health and Housing, Colorado Department of Human Services

Created by Epidemiology Planning and Evaluation Branch, Colorado Department of Public Health and Environment, September, 2010

[71] Colorado Department of Human Services, Division of Behavioral Health website: www.cdhs.state.co.us/dmh/

[72] "Mental Health: Colorado Population in Need, 2009," Western Interstate Commission on Higher Education. Sponsored by the Colorado Department of Human Services Office of Behavioral Health and Housing Division of Behavioral Health

Individual counties and their Substance Abuse Planning Region are presented in Figure 31.

FIGURE 31: COLORADO – Substate Regions defined by counties, used for Substance Abuse Planning

Region 1	Region 2	Region 7	Region 3	Region 4		Region 5	Region 6
Cheyenne	Adams	Boulder	Chaffee	Alamosa	Pueblo	Archuleta	Eagle
Elbert	Arapahoe		Custer	Baca	Rio Grande	Delta	Garfield
Kit Carson	Broomfield		El Paso	Bent	Saguache	Dolores	Grand
Larimer	Clear Creek		Fremont	Conejos		Gunnison	Jackson
Lincoln	Denver		Lake	Costilla		Hinsdale	Mesa
Logan	Douglas		Park	Crowley		La Plata	Moffat
Morgan	Gilpin		Teller	Huerfano		Montezuma	Pitkin
Phillips	Jefferson			Kiowa		Montrose	Rio Blanco
Sedgwick				Las Animas		Ouray	Routt
Washington				Mineral		San Juan	Summit
Weld				Otero		San Miguel	
Yuma				Prowers			

Health Care Policy and Financing: The Department of Health Care Policy and Financing (HCPF) is designated as the single state agency to administer Colorado's Medicaid program, which is a health care benefit program for low income and special needs Colorado residents. HCPF's responsibility within the publicly-funded mental health system is to administer the Medicaid program statewide including:

- Contracting with behavioral health organizations (BHOs)
- Adopting standards, rules and regulations for the Medicaid program
- Monitoring mental health providers to ensure high quality, accessible mental health services
- Responding to complaints regarding the Medicaid program, services and providers

There are five Behavioral Health Organizations that are responsible for implementing the Medicaid Mental Health Capitation Program through contracts with the Colorado Department of Health Care Policy and Financing. The BHOs operate managed care programs serving all of Colorado's 64 counties. Each BHO is responsible for managing the delivery of mental health services to Medicaid-eligible individuals in its assigned geographic service area.[73] Currently, BHOs provide a small portion of substance abuse treatment and counseling services to Medicaid clients, because the funding is minimal. With the enactment of health care reform, richer benefits will be available to BHO's who will become a more significant service provider in this arena.

Publically-Funded Substance Abuse Treatment Centers

Publically-funded, licensed substance use treatment centers offer a variety of substance use services including assessment, detoxification, DUI education and therapy, case management, outpatient services, medication assisted treatment, and residential treatment. Many have special programs targeting offenders, women, methamphetamine users, the Spanish speaking population, deaf and hard of hearing populations, and individuals with co-occurring mental illness. Services are described below:

- A substance abuse assessment utilizes screening tools to detail the individual's history, diagnostic profile, and treatment recommendations.
- Detoxification provides a non-hospital, social setting for adults to facilitate safe withdrawal from alcohol or drugs, and engages appropriate clients in further treatment.

[73] Colorado Department of Human Services, Division of Behavioral Health website: www.cdhs.state.co.us/dmh/

- DUI education and therapy is provided for those who have received one or more alcohol-related driving citations.
- Outpatient services are longer term and offer specialized programming including individual, group, and family therapy, education on substance use issues, goal setting, symptom management, life skills training and relationship issues.
- Residential – Comprehensive 24 hour care at one of 5 metro Denver residences. Specialized programs include adult, youth, pregnant and postpartum women, offenders, and transitional services. Residential short-term treatment (30 days or less)
- Case management services help clients access other community support systems and coordinate treatment services. An assessment helps determine what community resources the client needs. Case management services are provided through linkage, advocacy, service planning, follow-up, monitoring, and crisis management.

Needs of Low Income Populations: Adolescents

Colorado is one of only a few states that has treatment standards specific to the treatment of minors. Annually the Division of Behavioral Health (DBH) serves over 5,000 adolescents in every modality through their licensed treatment programs. Colorado has over 325 program sites, licensed to treat minors. There is an estimated 28,990 substance abusers 10-18 years of age in Colorado. Of these, at least 50-60 percent were diagnosed with a mental health issue in addition to their substance abuse disorder. With approximately 5,000 young people completing treatment in Colorado's licensed programs, an estimated 23,586 youth are not receiving services. The primary drug of choice is marijuana followed by alcohol. [74]

Needs of Low Income Populations: Adults

The Division of Behavioral Health sponsors a study of populations in need of mental health and substance abuse services every few years. The study measures 1) how many low income Coloradans presently need public behavioral health services, 2) how many are currently accessing these services, and 3) the estimated gap of persons who need public services, would benefit from them, but have not yet accessed them. Furthermore, this type of study facilitates an understanding of Colorado's low income population based on age, race, gender, marital status, education, poverty, and residence, which enables the State and its stakeholders to effect change in policy, develop targeted plans for service, advocate for the needs of special populations, improve access to services by underserved groups, evaluate the outcomes of services, and contract and finance services based on need, capacity, and performance.

The most recent study is entitled "Mental Health: Colorado Population in Need, 2009" or COPIN. Figure 32 uses COPIN data to show the substance abuse planning areas, community mental health service areas, the number and rate of low income adults accessing services (excluding assessment-only clients), and the number and rate of low income adults in need of services. Unmet need was calculated as the prevalence estimate minus the number of unduplicated individuals served. Adults with both substance use disorders and co-occurring disorders (substance use and mental health disorder) were included. [75]

[74] "Mental Health: Colorado Population in Need, 2009," Western Interstate Commission on Higher Education. Sponsored by the Colorado Department of Human Services Office of Behavioral Health and Housing Division of Behavioral Health. Tables 7 and 8.
[75] Note: The municipality of Aurora is a separate mental health service area with parts in Adams and Arapahoe County, so is included separately on this table.

FIGURE 32: Rate of Utilization and Unmet Needs for Adults (ages 18+), Co-Occurring Disorders and Substance Use Disorders by Substance Abuse Planning Areas, Colorado 2007

Substance Abuse Planning Area	Mental Health Service Area	Counties + City of Aurora	2007 Population	Service Utilization *(#Individuals)*	Rate of Utilization *(Per 1,000)*	Unmet Need *(#Individuals)*	Rate of Unmet Need *(Per 1,000)*
Northeast		Sedgwick	2,509				
		Phillips	4,601				
		Yuma	9,973				
		Kit Carson	8,144				
		Cheyenne	1,995				
		Lincoln	5,722				
		Washington	4,833				
		Morgan	28,573				
		Elbert	23,092				
		Logan	21,879				
	Centennial	Total	111,321	538	4.8	1686	15.1
	North Range	Weld	244,515	1,449	5.9	3551	14.5
	Larimer	Larimer	288,261	1,089	3.8	4287	14.9
Boulder/ Broomfield		Boulder	294,654				
		Broomfield	53,691				
	Boulder	Total	348,345	1,242	3.6	4547	13.1
Southeast and Pueblo		Huerfano	7,958				
		Las Animas	16,568				
	Spanish Peaks	Pueblo	155,723				
		Total	180,249	2,477	13.7	1267	7.0
		Baca	4,188				
		Bent	5,926				
		Crowley	6,481				
		Kiowa	1,469				
		Otero	19,129				
		Prowers	13,407				
	Southeast	Total	50,600	628	12.4	755	14.9
		Mineral	993				
		Saguache	6,915				
		Alamosa	15,760				
		Conejos	8,388				
	San Luis Valley	Costilla	3,548				
		Total	35,604	1,370	38.5	-390	-11.0

Substance Abuse Planning Area	Mental Health Service Area	Counties + City of Aurora	2007 Population	Service Utilization *(#Individuals)*	Rate of Utilization *(Per 1,000)*	Unmet Need *(#Individuals)*	Rate of Unmet Need *(Per 1,000)*
Central and CO Springs		Park	17,005				
		El Paso	587,590				
		Teller	22,883				
		Elbert	23,086				
	Pikes Peak	Total	650,564	4,991	7.7	4439	6.8
		Fremont	48,005				
		Chaffee	16,942				
		Lake	8,190				
		Custer	4,100				
	West Central	Total	77,237	880	11.4	1139	14.7
Metro Denver	Adams	Adams	424,379	3,094	7.3	3330	7.8
	Arapahoe/ Douglas	Arapahoe	551,733				
		Douglas	275,121				
		Total	826,854	466	0.6	4347	5.3
	Aurora	Aurora	324,655	896	2.8	3185	9.8
	Denver	Denver	596,582	5,922	9.9	5724	9.6
		Jefferson	538,323				
		Gilpin	5,137				
		Clear Creek	9,412				
	Jefferson	Total	552,872	1,873	3.4	4443	8.0
Northwest	Colorado West	Summit	28,611				
		Eagle	52,532				
		Grand	14,383				
		Jackson	1,476				
		Routt	23,060				
		Pitkin	16,607				
		Mesa	140,416				
		Garfield	55,063				
		Rio Blanco	6,434				
		Moffat	13,928				
		Total	352,510	2,223	6.3	4540	12.9
Southwest	Midwestern	Gunnison	15,048				
		Delta	30,959				
		Montrose	40,263				
		Ouray	4,510				
		San Miguel	7,684				
		Total	98,464	496	5.0	1463	14.9
	Southwest	Dolores	1,937				
		Montezuma	25,561				
		San Juan	571				
		Hinsdale	870				
		Archuleta	12,625				
		La Plata	49,758				
		Total	91,322	1,242	13.6	743	8.1
Total			**5,254,334**	**30,248**	**5.8**	**49,056**	**9.3**

In summary of Figure 32, in 2007 Colorado's public substance use treatment system provided services to 30,897 low income individuals (FPL 300 %), for a rate of 5.8 per 1,000 Colorado residents.[76] According to the COPIN study, as many as 49,056 low income individuals or a rate of9.3 per 1,000 Colorado residents with substance use disorders or co-occurring disorders may still be in need of substance use treatment.
Figures 33, 34, 35, and 36 indicate the mental health service areas that had the highest number of residents utilizing services, the highest rate of residents utilizing services, the highest number of residents in need, and highest rate of residents in need. In addition, counties that have been identified by this Home Visitation Assessment as being "at-risk" are highlighted with an asterisk.

Service Utilization

FIGURE 33: Mental Health Service Areas with the Highest Number of Low Income, Substance Abuse Clients Utilizing Services, 2007

Substance Abuse Planning Area	Mental Health Service Area	County or Counties	"At-risk" Counties	Area Type: Urban, Rural, Frontier	Number of Clients Utilizing Services
Metro Denver	Denver	Denver	Denver	Urban	5,922
Central and CO Spring	Pikes Peak	Park, El Paso, Teller, Elbert	---	Urban	4,991
Metro Denver	Adams	Adams	Adams	Urban	3,094
Southeast and Pueblo	Spanish Peaks	Huerfano, Las Animas, Pueblo	Huerfano, Pueblo	Urban, Frontier	2,477
Northwest	Colorado West	Summit, Eagle, Grand, Jackson, Routt, Pitkin, Mesa, Garfield	Mesa	Urban, Rural, Frontier	2,223

FIGURE 34: Substance Abuse Planning Areas and Mental Health Service Areas with the Highest Rate of Low Income, Substance Abuse Clients Utilizing Services, 2007

Substance Abuse Planning Area	Mental Health Service Area	County or Counties	"At-risk" Counties	Area Type: Urban, Rural, Frontier	Rate of Clients Utilizing Services
	Colorado	---	--	---	**5.8/1000 residents**
Southeast and Pueblo	San Luis Valley	Mineral, Saguache, Alamosa, Conejos, Costilla	Alamosa, Saguache, Costilla	Rural, Frontier	38.5/1,000 Residents
Southwest	Southwest	Dolores, Montezuma, San Juan, Hinsdale, Archuleta, La Plata	---	Rural, Frontier	13.6/1,000 residents
Southeast and Pueblo	Spanish Peaks	Huerfano, Las Animas, Pueblo	Huerfano, Pueblo	Urban, Frontier	13.6/1,000 residents
Southeast and Pueblo	Southeast	Baca, Bent, Crowley, Kiowa, Otero	Baca, Otero, Crowley	Rural, Frontier	12.4/1,000 residents

[76] Note: Populations included in this study include low income households (i.e., below 300% of the FPL), those living in group homes, and, those living in institutions.

Service Need

FIGURE 35: Highest Number of Low Income Individuals in Need of Substance Abuse Services by Substance Abuse Planning Area and Mental Health Service Area, 2007

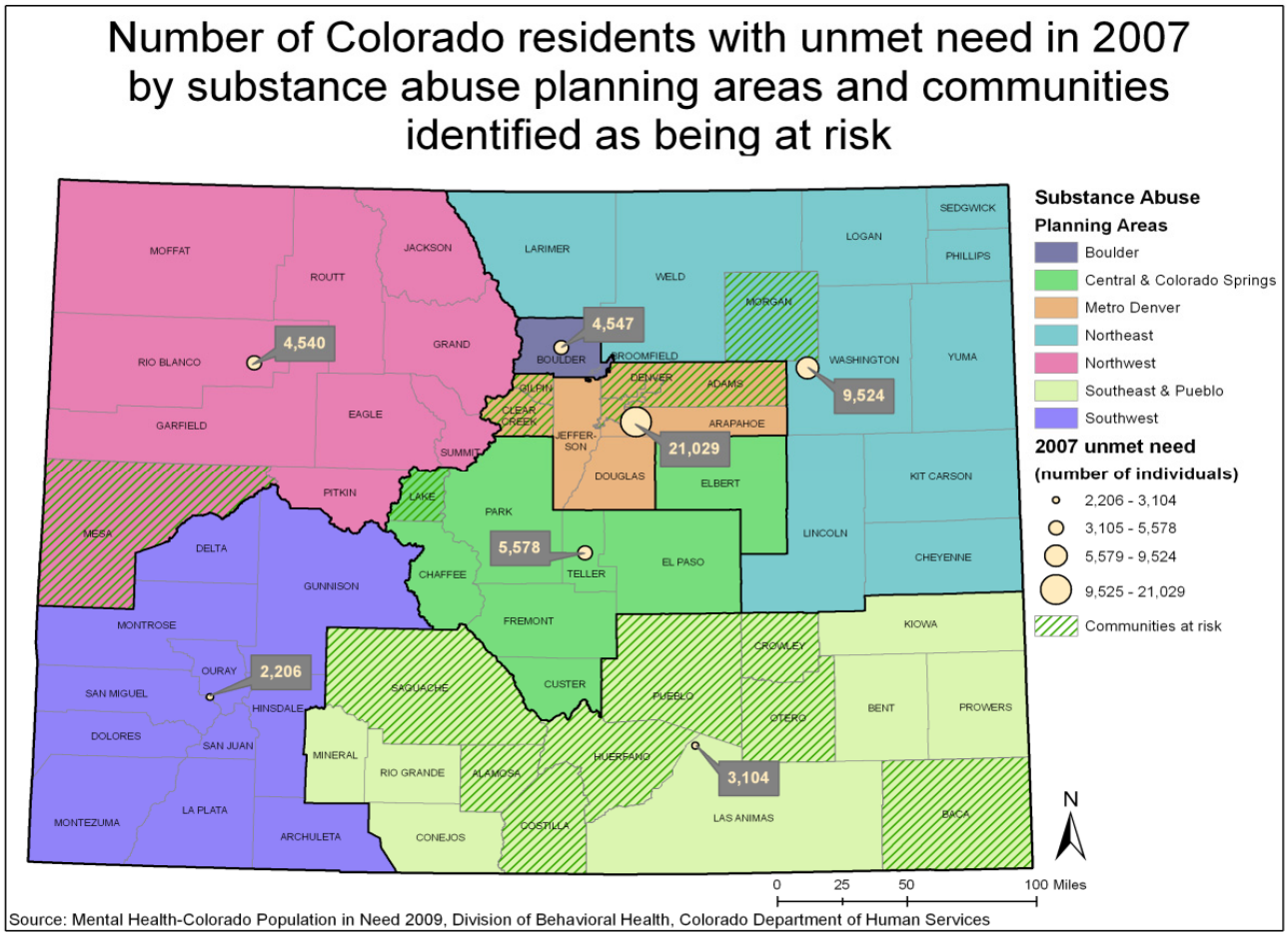
Substance Abuse Planning Area	Mental Health Service Area	County or Counties	At-risk Counties	Area Type: Urban, Rural Frontier	Number of Individuals in Need of Services
Metro Denver	Denver	Denver	Denver	Urban	5,742
Boulder/ Broomfield	Boulder	Boulder, Broomfield	---	Urban	4,547
Northwest	Colorado West	Summit, Eagle, Grand, Jackson, Routt, Pitkin, Mesa, Garfield	Mesa	Rural, Frontier	4,540
Metro Denver	Jefferson	Jefferson, Clear Creek, Gilpin	---	Urban	4,287
Central and CO Springs	Pikes Peak	Park, El Paso, Teller, Elbert	---	Urban, Rural	4,439
Metro Denver	Arapahoe/ Douglas	Arapahoe, Douglas	---	Urban	4,347
Northeast	Larimer	Larimer	---	Urban	4,287

FIGURE 36: Highest Rate of Low Income Individuals in Need of Substance Abuse Services by Substance Abuse Planning Area and Mental Health Service Area, 2007

Substance Abuse Planning Area	Mental Health Service Area	County or Counties	"At-risk" Counties	Area Type: Urban, Rural,Frontier	Rate of Individuals in Need *(per 1,000 residents)*
	Colorado	**---**	**--**		**10/1000**
Northeast	Centennial	Sedgwick, Phillips, Yuma, Kit Carson, Cheyenne, Lincoln, Washington, Morgan, Elbert, Logan	Morgan	Rural, Frontier	15.1/1,000
Northeast	Larimer	Larimer	---	Urban	14.9/1,000
Southwest	Midwestern	Gunnison, Delta, Montrose, Ouray, San Miguel	---	Urban, Frontier	14.9/1,000
Southwest	Southwest	Baca, Bent, Crowley, Kiowa, Otero, Powers	Baca, Otero, Crowley	Rural, Frontier	14.9/1,000
Northeast	West Central	Fremont, Chaffee, Lake, Custer	Lake	Urban, Rural, Frontier	14.7/1,000
Northeast	North Range	Weld County	---	Urban	14.5/1,000

Figure 37 is a Colorado map of Substance Abuse Planning Areas that further utilizes COPIN data to illustrate the need in each region, by number of low income clients potentially in need of substance abuse treatment.

FIGURE 37



Source: Mental Health-Colorado Population in Need 2009, Division of Behavioral Health, Colorado Department of Human Services

Created by Epidemiology Planning and Evaluation Branch, Colorado Department of Public Health and Environment, September, 2010

This Section in Relation to the Home Visitation Needs Assessment

Federal guidance for the Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program gave directions to "discuss the State's capacity for providing substance abuse treatment and counseling services to individuals and families in need of such treatment or services." The Division of Behavioral Health in interested in an ongoing partnership for the planning and implementation of additional home visitation services in Colorado. As part of the state's mental health system, Early Childhood Specialists that serve children ages 0-11 but focus on children ages 0-5, are already a part of the statewide infrastructure. These specialists are mental health professionals that provide community outreach and education to schools and early childhood organizations, to support services for at-risk children and their families.

Conclusions/Next Steps

The process for states to fulfill the requirements necessary to receive FY 2010 Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program funding include:

1. Submission of an application for funding
2. Submission of a statewide needs assessment
3. Submission of an updated state plan to include a more detailed needs and resources assessment for targeted communities

This assessment initiated the process to gather and document existing home visitation programs in Colorado, particularly within communities identified by this assessment to be "at risk." Next, it will be important to work with all stakeholders , which includes the state's early childhood community, to determine how to use the program funding in the most efficient and effective way. In addition to the information collected for this needs assessment, existing capacity and future infrastructure needs will need to be considered in Colorado's updated state plan for home visitation.

Appendix A

Statewide Data Reporting Matrix

See attached spreadsheet.

APPENDIX A - COLORADO COMMUNITIES AT RISK

SEPTEMBER, 2010

INDICATORS	ASSESSMENT SOURCE	YEARS	CO	Adams County	Alamosa County	Baca County	Clear Creek County	Costilla County	Crowley County	Denver County	Gilpin County	Huerfano County	Lake County	Mesa County	Morgan County	Otero County	Pueblo County	Saguache County
Premature Birth	Title V	2006-2008	**9.7%**	9.8%	8.7%	14.4%	11.2%	14.7%	12.8%	10.0%	12.2%	12.8%	12.8%	8.1%	10.3%	11.3%	9.2%	10.2%
Low Birth Weight	Title V	2006-2008	**9.0%**	9.1%	10.2%	12.1%	11.2%	14.9%	10.6%	9.6%	14.5%	15.7%	15.3%	7.6%	8.4%	9.4%	9.4%	9.4%
Infant Mortality	Title V	2004-2008	**6.2 per 1,000**	6.8 per 1,000	3.9 per 1,000	7.1* per 1,000	14.6 per 1,000	8.0* per 1,000	0.0 per 1,000	7.1 per 1,000	10.1 per 1,000	13.4 per 1,000	5.2* per 1,000	4.4 per 1,000	8.4 per 1,000	8.2 per 1,000	6.3 per 1,000	17.8 per 1,000
Poverty	Title V	2008	**11.2%**	12.0%	21.4%	17.7%	7.4%	24.8%	46.2%	18.0%	6.2%	23.8%	12.7%	10.6%	12.7%	22.2%	16.8%	29.9%
# Reported Crimes per 1,000 residents	Colorado Bureau of Investigation	2009	**34.6 per 1,000**	74.7 per 1,000	51.6 per 1,000	9.2 per 1,000	23.3 per 1,000	0.0 per 1,000	1.9 per 1,000	44.4 per 1,000	53.4 per 1,000	2.7 per 1,000	16.8 per 1,000	39.3 per 1,000	20.4 per 1,000	35.3 per 1,000	45.8 per 1,000	12.2 per 1,000
# Crime arrests per 1,000 juveniles (10-17 years old)**	Colorado Bureau of Investigation	2009	**75.0 per 1,000**	212.6 per 1,000	77.9 per 1,000	7.1 per 1,000	36.0 per 1,000	0.0 per 1,000	6.1 per 1,000	48.4 per 1,000	39.5 per 1,000	1.5 per 1,000	29.7 per 1,000	102.6 per 1,000	64.7 per 1,000	63.0 per 1,000	9.8 per 1,000	37.8 per 1,000
Domestic Violence	None	Not Available	**--**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
% high school drop-outs, grade 9-12	Title V	2009	**5.0%**	8.0%	3.7%	17.2%	1.8%	0.6%	3.1%	10.2%	3.0%	5.5%	10.5%	5.9%	3.3%	1.8%	6.3%	5.5%
Binge alcohol in past month (12 - 20 years of age)	SAMHSA	2002-2004	**21.1%**	20.6%	20.3%	20.3%	20.6%	20.3%	20.3%	20.6%	20.6%	20.3%	21.5%	21.4%	22.5%	20.3%	20.3%	20.3%
Marijuana use in past month (12 years old+)	SAMHSA	2002-2004	**7.3%**	7.9%	5.0%	5.0%	7.9%	5.0%	5.0%	7.9%	7.9%	5.0%	6.3%	7.1%	7.1%	5.0%	5.0%	5.0%
Nonmedical use of pain relievers past year (12 years old+)	SAMHSA	2002-2004	**5.6%**	5.5%	6.4%	6.4%	5.5%	6.4%	6.4%	5.5%	5.5%	6.4%	5.5%	6.1%	5.5%	6.4%	6.4%	6.4%
Use of illicit drugs excluding marijuana in past month (12 years old+)	SAMHSA	2002-2004	**4.3%**	4.2%	3.9%	3.9%	4.2%	3.9%	3.9%	4.2%	4.2%	3.9%	4.5%	4.7%	4.0%	3.9%	3.9%	3.9%
Unemployment rate	Head Start	July, 2010	**8.0%**	9.1%	7.2%	4.0%	7.8%	12.4%	9.9%	8.7%	6.9%	10.3%	11.2%	9.5%	6.8%	8.1%	9.8%	11.6%
Overall Substantiated Maltreatment (0-17 years old)	CAPTA	2008	**8.6 per 1,000**	13.2 per 1,000	22.8 per 1,000	3.6 per 1,000	18.4 per 1,000	0.0 per 1,000	15.2 per 1,000	8.4 per 1,000	4.5 per 1,000	24.1 per 1,000	6.0 per 1,000	9.8 per 1,000	18.5 per 1,000	7.9 per 1,000	7.7 per 1,000	15.2 per 1,000
Substantiated Maltreatment Neglect (0-17 years old)	CAPTA	2008	**6.0 per 1,000**	10.0 per 1,000	15.4 per 1,000	0.0 per 1,000	14.7 per 1,000	0.0 per 1,000	14.2 per 1,000	4.9 per 1,000	3.6 per 1,000	20.9 per 1,000	3.4 per 1,000	6.7 per 1,000	15.6 per 1,000	4.9 per 1,000	6.3 per 1,000	9.9 per 1,000
Substantiated Maltreatment Medical Neglect (0-17 years old)	CAPTA	2008	**0.1 per 1,000**	0.01 per 1,000	0.0 per 1,000	1.2 per 1,000	0.9 per 1,000	0.0 per 1,000	0.0 per 1,000	0.2 per 1,000	0.0 per 1,000	0.0 per 1,000	0.0 per 1,000	0.2 per 1,000	0.2 per 1,000	0.2 per 1,000	0.1 per 1,000	0.0 per 1,000
Substantiated Maltreatment Physical Abuse (0-17 years old)	CAPTA	2008	**1.3 per 1,000**	1.8 per 1,000	3.1 per 1,000	0.0 per 1,000	1.4 per 1,000	0.0 per 1,000	0.0 per 1,000	1.5 per 1,000	0.9 per 1,000	0.6 per 1,000	0.4 per 1,000	1.3 per 1,000	2.2 per 1,000	1.6 per 1,000	0.8 per 1,000	4.1 per 1,000
Substantiated Maltreatment Sexual Abuse (0-17 years old)	CAPTA	2008	**0.7 per 1,000**	0.6 per 1,000	3.1 per 1,000	0.0 per 1,000	0.0 per 1,000	0.0 per 1,000	1.0 per 1,000	0.7 per 1,000	0.0 per 1,000	0.6 per 1,000	0.0 per 1,000	1.3 per 1,000	0.5 per 1,000	0.4 per 1,000	0.3 per 1,000	0.6 per 1,000

***County data suppressed due to small numbers; estimates come regional data**

****Crime data for ages 0 - 19 was unavailable; rates available for juveniles 10 - 17 years of age**

APPENDIX A - COLORADO COMMUNITIES AT RISK

SEPTEMBER, 2010

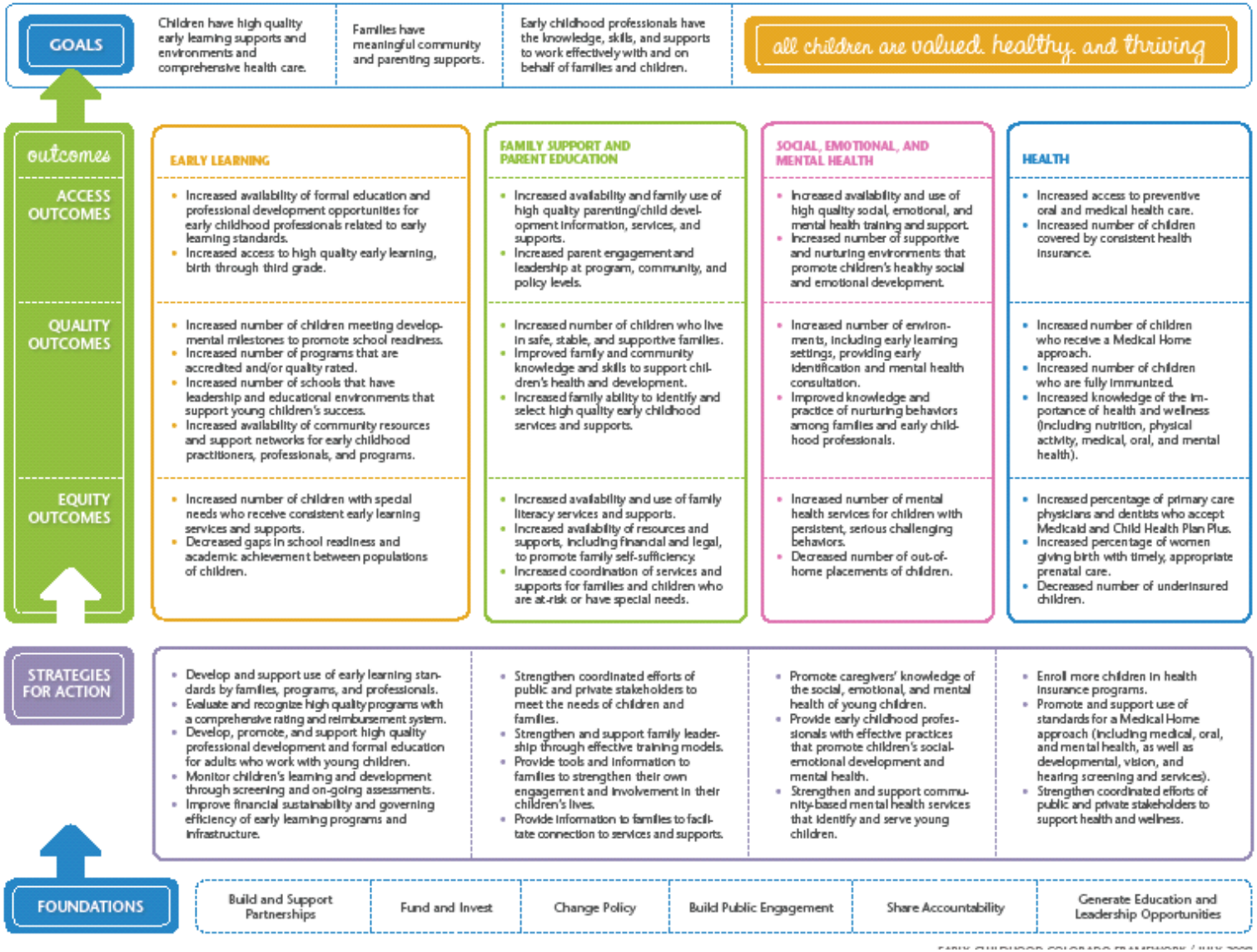
INDICATORS	ASSESSMENT SOURCE	YEARS	CO	Adams County	Alamosa County	Baca County	Clear Creek County	Costilla County	Crowley County	Denver County	Gilpin County	Huerfano County	Lake County	Mesa County	Morgan County	Otero County	Pueblo County	Saguache County
Substantiated Maltreatment Psychological (0-17 years old)	CAPTA	2008	**0.2 per 1,000**	0.1 per 1,000	0.7 per 1,000	0.0 per 1,000	0.0 per 1,000	0.0 per 1,000	0.0 per 1,000	0.1 per 1,000	0.0 per 1,000	1.3 per 1,000	0.9 per 1,000	0.1 per 1,000	0.1 per 1,000	0.0 per 1,000	0.1 per 1,000	0.6 per 1,000
Substantiated Maltreatment Unk/Missing (0-17 years old)	CAPTA	2008	**0.4 per 1,000**	0.6 per 1,000	0.5 per 1,000	2.4 per 1,000	1.4 per 1,000	0.0 per 1,000	0.0 per 1,000	0.9 per 1,000	0.0 per 1,000	0.6 per 1,000	1.3 per 1,000	0.1 per 1,000	0.0 per 1,000	0.8 per 1,000	0.1 per 1,000	0.0 per 1,000
(CO Indicator) Infant Death due to Maltreatment	Colorado Child Fatality Review Committee	2004-2006	**10.6 per 100,000**	18.9 per 100,000	0.0 per 100,000	0.0 per 100,000	0.0 per 100,000	0.0 per 100,000	0.0 per 100,000	15.3 per 100,000	0.0 per 100,000	0.0 per 100,000	0.0 per 100,000	37.7 per 100,000	0.0 per 100,000	0.0 per 100,000	33.5 per 100,000	0.0 per 100,000
(CO Indicator) Maternal 3 Risk Factors (unmarried, ≤ 25 years of age , < high school edu.)	Colorado Birth Certificate	2008	**6.7%**	8.5%	8.9%	15.0%	3.5%	12.9%	10.0%	8.4%	5.2%	16.3%	17.5%	6.8%	12.0%	9.2%	13.0%	13.8%
(CO Indicator) Child Deaths (1-14 years of age)	Colorado Death Certificate	2004-2008	**17.7 per 100,000**	13.8 per 100,000	32.5 per 100,000	0.0 per 100,000	0.0 per 100,000	0.0 per 100,000	27.7* per 100,000	21.4 per 100,000	0.0 per 100,000	27.7* per 100,000	33.5* per 100,000	23.6 per 100,000	44.7 per 100,000	15.4 per 100,000	24.2 per 100,000	0.0 per 100,000
(CO Indicator) Children (≤18 years of age) in poverty	US Census Bureau	2006-2007	**14.4%**	16.6%	27.8%	27.4%	11.0%	37.4%	34.4%	25.2%	7.7%	31.5%	19.4%	13.6%	17.5%	31.5%	23.9%	43.9%

***County data suppressed due to small numbers; estimates come regional data**

****Crime data for ages 0 - 19 was unavailable; rates available for juveniles 10 - 17 years of age**

Appendix B

Colorado's Early Childhood Framework



Appendix C

Colorado's Request for Information Responses by Home Visitation Programs

Name of Agency	Name of Program
Montrose County Health & Human Services	Healthy Steps Nurse Home Visitation
Jefferson County Public Health	Public Health/Human Services Collaboration Program
Colorado Home Intervention Program (CHIP)	Colorado Home Intervention Program (CHIP)
Otero Junior College Child Development Services	Services Early Head Start Home Visitation
Rocky Mountain SER/Jobs for Progress-Grand Jct.	Treasure Chest Early Literacy Program
Eagle County Government (HHS)	Early Childhood Services
Boulder County PH/HHS/Dept of Housing	The Community Infant Program
Family Visitor Program of Garfield County	Healthy Families America
Larimer County Department of Health & Environment	The Nurturing Program
El Paso County Dept of Health	Strong and Healthy Families
Poudre School District Early Childhood Education Program	Early Head Start

Appendix D

Letters of Support

See attached letters.

STATE OF COLORADO

OFFICE OF THE LIEUTENANT GOVERNOR
130 State Capitol
Denver, Colorado 80203-1792
Phone: (303) 866-2087

Barbara O'Brien
Lieutenant Governor

Audrey M. Yowell, PhD, MSSS
Health Resources and Services Administration
Maternal and Child Health Bureau
5600 Fishers Lane
18A-39
Rockville, Maryland 20857

Dear Ms. Yowell:

As the Director of Head Start State Collaboration, my role is to facilitate coordination and collaboration between Head Start programs and state and local organizations that are designed to benefit low-income children and their families.

As a continuing participant in planning conversations for Colorado's grant application for the Affordable Care Act Maternal, Infant and Early Childhood Home Visitation Program (CDFA #93.505), I support the needs assessment being submitted by the Colorado Department of Public Health and Environment as Step 2 of the application process.

I enthusiastically support this opportunity to further efforts to improve health outcomes for at-risk children in our state through the provision of evidence-based home visitation programs. I look forward to collaborating in the development of Colorado's updated State Plan for this project.

Sincerely,

Elizabeth Groginsky
Director
Head Start State Collaboration

STATE OF COLORADO

Colorado Department of Human Services
people who help people

OFFICE OF BEHAVIORAL HEALTH AND HOUSING
Joscelyn L. Gay, Deputy Executive Director

DIVISION OF BEHAVIORAL HEALTH
Janet Wood, M.B.A., M.Ed., Director

3824 West Princeton Circle
Denver, Colorado 80236
Phone 303-866-7400
Faxes 303-866-7428, 303-866-7481
www.cdhs.state.co.us

Bill Ritter, Jr.
Governor

Karen L. Beye
Executive Director

September 14, 2010

Audrey M. Yowell, PhD, MSSS
Health Resources and Services Administration
Maternal and Child Health Bureau
5600 Fishers Lane
18A-39
Rockville, Maryland 20857

Dear Ms. Yowell:

As the Director of the Division of Behavioral Health (DBH) within the Colorado Department of Human Services, I serve as both the Single State Agency (SSA) for Substance Abuse and the Mental Health Commissioner for Colorado. DBH oversees the publicly funded behavioral health community prevention, intervention, treatment and recovery programs, which includes the licensure of substance use disorder treatment programs statewide. DBH also commissioned the 2009 Population in Need Study referenced in this application.

As a continuing participant in planning conversations for Colorado's grant application for the Affordable Care Act Maternal, Infant and Early Childhood Home Visitation Program (CDFA #93.505), I support the needs assessment being submitted by the Colorado Department of Public Health and Environment as Step 2 of the application process.

I enthusiastically support this opportunity to improve health outcomes for at-risk children in our state through the provision of evidence-based home visitation programs. I look forward to collaborating in the development of Colorado's updated State Plan for this project.

Sincerely,

Janet Wood

Janet Wood, M.B.A., M.Ed.
Director

STATE OF COLORADO

Bill Ritter, Jr., Governor
Martha E. Rudolph, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

http://www.cdphe.state.co.us

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

Colorado Department
of Public Health
and Environment

September 14, 2010

Audrey M. Yowell, PhD, MSSS
Health Resources and Services Administration
Maternal and Child Health Bureau
5600 Fishers Lane
18A-39
Rockville, Maryland 20857

Dear Ms. Yowell:

As the Director for the Center for Healthy Families and Communities, I also serve as the Maternal and Child Health (MCH) Program Director for the Colorado Department of Public Health and Environment (CDPHE). In this role, I am responsible for Colorado's MCH needs assessment and five-year state plan, as well as for oversight of the department's MCH-related programs.

As a continuing participant in planning conversations for Colorado's grant application for the Affordable Care Act Maternal, Infant and Early Childhood Home Visitation Program (CDFA #93.505), I endorse the needs assessment being submitted by the Colorado Department of Public Health and Environment as Step 2 of the application process.

I enthusiastically support this opportunity to further efforts to improve health outcomes for at-risk children in our state through the provision of evidence-based home visitation programs. I look forward to collaborating in the development of Colorado's updated State Plan for this project.

Sincerely,

Karen Trierweiler

Karen Trierweiler, M.S., C.N.M.
Director, Center for Healthy Families and Communities
Director, Maternal and Child Health Program
Prevention Services Division
Karen.trierweiler@state.co.us/303.692.2481

STATE OF COLORADO

Bill Ritter, Jr., Governor
Martha E. Rudolph, Executive Director

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Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

Colorado Department
of Public Health
and Environment

September 14, 2010

Audrey M. Yowell, PhD, MSSS
Health Resources and Services Administration
Maternal and Child Health Bureau
5600 Fishers Lane
18A-39
Rockville, Maryland 20857

Dear Ms. Yowell:

As the Director of the Colorado Children's Trust Fund and the Family Resource Center Program, I am responsible for oversight of the funding received by Colorado through Title II of the Child Abuse Prevention and Treatment Act (CAPTA).

As a continuing participant in planning conversations for Colorado's grant application for the Affordable Care Act Maternal, Infant and Early Childhood Home Visitation Program (CDFA #93.505), I endorse the needs assessment being submitted by the Colorado Department of Public Health and Environment as Step 2 of the application process.

I enthusiastically support this opportunity to further efforts to improve health outcomes for at-risk children in our state through the provision of evidence-based home visitation programs. I look forward to collaborating in the development of Colorado's updated State Plan for this project.

Sincerely,

Scott Bates, MSW
Director, Colorado Children's Trust Fund & Family Resource Centers
Prevention Services Division
Colorado Department of Public Health and Environment
303.692.2942
scott.bates@state.co.us