PACEY ECONOMICS GROUP

A Corporation
6630 Gunpark Drive, Suite 200 • Boulder, CO 80301 • (303) 530-5333 • fax (303) 530-5371

NURSE HOME VISITOR PROGRAM

PERFORMANCE AUDIT
AUGUST 2002

Submitted to the Office of the State Auditor

Patricia L. Pacey, Ph.D.
Lynnette St. Jean, M.A.
Alicia V. Lehan

LEGISLATIVE AUDIT COMMITTEE
2002 MEMBERS

Senator Jack Taylor
Chairman

Senator Ron Tupa
Vice-Chairman

Senator Norma Anderson
Representative Fran Coleman
Representative Glenn Scott
Senator Stephanie Takis
Representative Val Vigil
Representative Tambor Williams

Office of the State Auditor Staff

Joanne Hill
State Auditor

Sally W. Symanski
Deputy State Auditor

Heather Moritz
Cindy P. Drake
Legislative Auditors

PACEY ECONOMICS GROUP

A Corporation

6630 Gunpark Drive, Suite 200 • Boulder, CO 80301 • (303) 530-5333 • fax (303) 530-5371

August 30, 2002

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Nurse Home Visitor Program within the Department of Public Health and Environment. The Office of the State Auditor contracted with Pacey Economics Group to conduct this audit. The audit was conducted pursuant to Section 2-3-113, C.R.S., which requires the State Auditor to conduct or cause to be conducted program reviews and evaluations of the performance of each tobacco settlement program to determine if that program is effectively and efficiently meeting its stated goals. The report presents our findings, conclusions, and recommendations, and the responses of the Department of Public Health and Environment.

TABLE OF CONTENTS

PACEY ECONOMICS GROUP

A Corporation
6630 Gunpark Drive, Suite 200 • Boulder, CO 80301 • (303) 530-5333 • fax (303) 530-5371

REPORT SUMMARY

NURSE HOME VISITOR PROGRAM

Performance Audit
August 2002

This performance audit of the Nurse Home Visitor Program was conducted under the authority of Section 2-3-113, C.R.S., which requires the State Auditor to conduct or cause to be conducted program reviews and evaluations of the performance of each tobacco settlement program to determine if that program is effectively and efficiently meeting its stated goals. The Office of the State Auditor contracted with Pacey Economics Group to perform this audit. The audit was conducted in accordance with generally accepted auditing standards. The audit work was performed between May and August 2002, and included gathering information through document review, interviews, and analysis of data. We also developed a questionnaire to gather the responses of staff at each program site to a number of questions regarding the overall administration of the program, the application process, budgeting issues, and reporting requirements.

We would like to acknowledge the efforts and assistance extended by the Department of Public Health and Environment; the National Center for Children, Families, and Communities; the State Board of Health; Invest in Kids; and each of the program grant recipients.

Overview

The Nurse Home Visitor Program is authorized through Sections 25-31-101 through 25-31-108, C.R.S., or the "Colorado Nurse Home Visitor Program Act." The program offers home visits by specially trained nurses to first-time, low-income mothers during pregnancy and through the child's second birthday. The program was established to provide education on prenatal and infant care and nutrition, among other topics, in order to improve the health of mothers and their children. The program also provides assistance and education to improve the economic self-sufficiency of families.

Section 24-75-1104, C.R.S., sets forth the funding formula that is used to determine annual appropriation amounts for all tobacco settlement programs, including the Nurse Home Visitor Program. The Nurse Home Visitor Program will receive an increasing amount of tobacco settlement funds, which began with 3 percent of total tobacco settlement funding in Fiscal Year 2001 (about $2.4 million) and is expected to end with 19 percent of total funding in Fiscal Year 2010 (about $19 million) and thereafter. Since the State began using tobacco settlement monies to fund the Nurse Home Visitor Program in Fiscal Year 2001, it has awarded 16 local sites operating 17 programs a total of $12.5 million in grant funding, including the grants awarded for Fiscal Year 2003. As of March 1, 2002, tobacco-settlement funded sites have served a total of 1,302 women.

The following is a summary of the major audit findings.

Eligibility Requirements Utilized by the Sites Conflict With the Statutory Language and Associated Documentation Is Lacking

The statute states that a woman is eligible for the Nurse Home Visitor Program if she is pregnant or her baby is less than one month old and her income is less than 200 percent of the federal poverty level. Rules promulgated by the State Board of Health state that preference will be given to women who enroll in the program prior to the 28th week of pregnancy.

We identified several areas in which the eligibility requirements utilized by the sites conflict with the statute. These areas include income criteria, gestational age at the time of enrollment, and age of the mother. First, some sites base eligibility on the woman's income only (which is the correct way to determine eligibility according to the statute), some include the spouse's income, and others use household income including the parents' income if the prospective client is a teenager residing with her parents. Second, we reviewed documents produced by the sites that outline the eligibility for the program to clients and outside care providers, such as site brochures and referral forms. Several of these documents state that to be eligible for the program a woman must be less than 28 weeks pregnant even though the statute allows for women to be enrolled up to one month post partum. Third, an eligibility requirement used by one local site is that women be age 19 or younger, even though the statute does not restrict services on the basis of a woman’s age.

Overall, the statute is the least restrictive program regulation regarding eligibility. The program rules are more restrictive than the statute and place a priority on reaching women early in their pregnancies. Because they are more restrictive than the statute, the program rules should only be invoked once a site reaches its full caseload. Until the

program is running at full capacity, no woman should be turned away as long as she meets the eligibility requirements set in statute.

Additionally, we found that sites do not verify client eligibility with respect to income. It is essential that sites are able to prove that their clients meet the program eligibility requirements; and, as such, it is important for sites to develop methods to document client eligibility in terms of income limitations.

Increase Departmental Monitoring of Local Program Site Operations

Considering the issues we identified related to eligibility determination and documentation, we believe the Department should more aggressively monitor the operations of the Nurse Home Visitor Program at the local site level. Examples of improved monitoring include testing the eligibility of program beneficiaries and reviewing the documentation utilized by the sites to determine eligibility and to market the program.

Moreover, program data show that several sites are not yet operating at full capacity. That is, sites have not filled all the program slots for which they received state funding. As of March 1, 2002, of the 12 sites in operation for at least 12 months, seven sites had not enrolled enough clients to meet their target enrollment. Additionally, these sites had only 849 active participants. This active caseload represents 75 percent of the total program slots funded for those sites. It is important to note that the total number enrolled reflects the number of women served since the program's inception. The number of active participants represents clients currently receiving services and excludes women who have left the program. In conjunction with increased monitoring of site operations to ensure that the program is being implemented in accordance with statute, the Department should carefully monitor caseloads and attrition to determine whether certain sites should continue to be funded at current levels or if other measures are needed to increase program participation.

Monitor Administrative Costs

The Department provides local sites with a sample budget to assist them in developing their individual program budgets. The sample budget includes a detailed narrative outlining the anticipated costs directly associated with providing services under the program. The Department requires that the sites explain in writing any significant variance in their budget items from those in the sample budget; and, with assistance from the National Center, Department staff review each budget line item to determine the appropriateness of each cost submitted by the site. We believe the Department has provided sufficient guidance to the sites about how to complete their budgets and

sufficiently reviews each budget to determine the appropriateness of most items. However, the Department has not yet implemented an effective mechanism to track and evaluate the administrative cost portion of the site budgets. Administrative costs are those costs necessary to implement a program but not linked directly to the provision of services. Administrative costs may include rent, utilities, and certain indirect costs like accounting services. Keeping administrative costs low is important to ensure that adequate funding is available for direct service costs such as nurses' salaries and travel-related expenses.

We also found that the Department's current budget process for the sites does not ensure that all costs associated with operating a program are reported to the Department. For instance, some local programs directly charge the Nurse Home Visitor Program for facility rent, while others may receive office space as an "in-kind" contribution from the agency that houses them. Moreover, some sites will list the value of this contribution in their budget as funding from another source, but others do not document this funding in their budget. Hence, site budgets do not consistently document all sources of program funding and therefore do not capture total program costs. Without tracking total program funding at each site, the Department cannot calculate the actual total cost of running the program. The program rules specify that Nurse Home Visitor Program grants are to cover the reasonable and necessary costs of administering the program. Unless the Department understands the true costs associated with operating the program at each local site, the Department and the State Board of Health cannot determine whether a particular site's budget includes reasonable and necessary costs.

Finally, our review of site budgets also revealed calculation errors related to indirect costs. Department staff explained that these errors were largely the result of the extremely short time frame for reviewing, modifying, and forwarding the budgets to the State Board of Health.

Provide Sites with Additional Computer Information System Training Opportunities

The National Center tracks a large amount of data as part of the Nurse-Family Partnership model. The data are collected by the nurses during the visits and are entered into a Web-based information system by the local site's data entry clerk. The initial training on the system consists of written documentation and two telephone conferences. For sites with less technical background or experience, this training is not sufficient.

Tracking and reviewing data is an important piece of the Nurse Home Visitor Program. It is emphasized in the Nurse-Family Partnership model, and nearly all of the individuals we interviewed during our audit indicated that data collection is one of the strengths of

the model. However, we found that there is a significant gap between the amount of technical experience necessary to retrieve data from the Web-based system and the database skills of the data entry clerks. Therefore, some clerks enter data twice: once into the National Center system and once into a spreadsheet for use at the site.

RECOMMENDATION LOCATOR

All recommendations are addressed to the Department of Public Health and Environment

Rec. No.	Page No.	Recommendation Summary	Agency Response	Implementation Date
1	24	Ensure that the Nurse Home Visitor Program is implemented in accordance with the eligibility requirements established in statute.	Agree	November 1, 2002
2	25	Develop an application process through which potential clients document their income or attest that they receive no income. Local sites should verify the reported income to the extent possible.	Agree	March 1, 2003
3	27	Develop and implement more aggressive monitoring of local site operations to ensure that sites implement the program in accordance with statutory guidelines and program rules. Monitor site caseloads and evaluate options for handling sites that do not maintain caseloads that match their capacities.	Agree	July 1, 2003
4	30	Improve oversight of program costs by: a. Ensuring that local administrative costs are reasonable and necessary by tracking and evaluating the administrative cost portion of site budgets. b. Capturing all cost information related to program operations. c. Implementing a quality control process for ensuring the accuracy of budgets.	4a: Agree 4b: Agree 4c: Agree	July 1, 2003 July 1, 2003 January, 2003
5	33	Ensure local sites are sufficiently trained on the Web-based system. If it is not possible to train sites on Access, make available additional reports that meet the sites' needs.	Agree	January, 2003

Description of the Nurse Home Visitor Program

The Nurse Home Visitor Program offers home visits by specially trained nurses to first-time, low-income mothers during pregnancy and through the second birthday of the child. A woman is eligible for the program if she is pregnant or her baby is less than one month old, and her income is less than 200 percent of the federal poverty level. The content of the home visits conducted by the nurses is aimed at three goals:

- Improving pregnancy outcomes by helping women practice sound health-related behaviors, including decreasing the use of cigarettes, alcohol, and illegal drugs and by improving their nutrition;

- Improving child health and development by helping parents provide more responsible and competent care for their children; and

- Improving the economic self-sufficiency of families by helping parents develop a vision for their future, plan future pregnancies, continue their education, and find work.

The model selected for replication in Colorado is referred to as the Nurse-Family Partnership and was developed by Dr. David Olds. Dr. Olds' model was implemented and evaluated through the completion of three clinical trials, the first in Elmira, New York; a second trial in Memphis, Tennessee; and the most recent trial conducted in Denver, Colorado. Fifteen years after the implementation of the first trial, a follow-up study demonstrated that the Nurse-Family Partnership produces numerous positive outcomes, including reduced smoking and alcohol use in pregnancy, improved birth outcomes, decreased incidence of neglect, and increased economic self-sufficiency. These results were published in the *Journal of the American Medical Association* in 1997.

For clarification, throughout this report references are made to both the Nurse-Family Partnership and the Nurse Home Visitor Program. The model developed by Dr. Olds and tested in the clinical trials is now named the Nurse-Family Partnership. This model includes a specific curriculum with several content areas and protocol for frequency and length of visits. The Colorado Nurse Home Visitor Program is the program established as part of the State's tobacco settlement agreement to implement the Nurse-Family Partnership model at sites throughout the State.

State statute identifies several agencies that are involved with the administration and evaluation of the Nurse Home Visitor Program. Additional entities have become involved

in the administration of the program through contractual relationships. For a more thorough understanding of the agencies involved in overseeing this program, a brief background of each entity follows.

STATE BOARD OF HEALTH

The nine-member State Board of Health is appointed by the Governor and confirmed by the Senate. The Board is charged with establishing rules and policies, as well as monitoring and providing advice on issues related to public health in Colorado. The State Board of Health is responsible for monitoring the operation and effectiveness of all of the tobacco settlement programs that receive appropriations from monies obtained by the State pursuant to the master settlement agreement.

The statute establishing the Nurse Home Visitor Program instructs the State Board of Health to promulgate rules for implementation of the program with regard to training requirements, protocols, computer information systems, and research-based program evaluation requirements. In addition, upon receipt of the list of entities recommended to receive grant funding, the Board selects the organizations that will administer the program in various communities across the State.

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

The Department of Public Health and Environment (Department) manages the program. This responsibility includes overseeing the competitive grant process, developing sample budgets, and evaluating and granting budget requests after grant selections are made by the State Board of Health. The Department also submits an annual report to the General Assembly and others in accordance with the program rules implemented by the State Board of Health. This report is prepared by the Department staff member who is responsible for monitoring all tobacco settlement programs and provides information on the amount of settlement money received by each tobacco settlement program, a description of the program, and an evaluation of the program's effectiveness in achieving its stated goals.

Additionally, through Senate Bill 00-71, the General Assembly requested that the Department research the possibility of obtaining federal Medicaid matching funds for services provided under the Nurse Home Visitor Program. The Colorado Medicaid program is administered by the Department of Health Care Policy and Financing, and the State receives a federal match on every dollar spent. In Fiscal Year 2003, the General Assembly funded a budget request from the Department of Public Health and Environment for the authority to use some Nurse Home Visitor Program funds to obtain a federal Medicaid match for targeted case management services provided to Medicaid-eligible clients enrolled in the program. The funding is necessary to cover enhancements

to Colorado's Medicaid Management Information System and the cost of claims processing through the system. Additionally, as stipulated in the request, the Department will bill the Department of Health Care Policy and Financing up to $1.5 million in Fiscal Year 2003 for the number of Medicaid-eligible Nurse Home Visitor Program clients served each month. According to the most recent data available, approximately 73 percent of program participants are also eligible for Medicaid. The Department estimates that once the process is implemented, Medicaid matching funds will offset between 26 and 34 percent of program costs.

NATIONAL CENTER FOR CHILDREN, FAMILIES, AND COMMUNITIES

The National Center for Children, Families, and Communities (National Center) is a non-profit organization based at the University of Colorado Health Sciences Center. The National Center was developed to conduct research and to implement programs designed to improve the lives of children and families. The first initiative implemented by the National Center is the Nurse-Family Partnership, and the National Center has assisted over 150 communities across the country in implementing the Nurse-Family Partnership.

Section 25-31-105(1), C.R.S., states that the president of the University of Colorado shall identify a facility with the knowledge and expertise necessary to assist the State Board of Health in selecting entities to operate the program as well as monitoring and evaluating the program throughout the State. In the year 2000, the National Center was selected to handle these responsibilities. Thus, the National Center has a contractual agreement with the Department to provide coordination of efforts regarding training, the application process, evaluation of implementation, and reporting requirements. The National Center has delegated a portion of these responsibilities to Invest in Kids, a non-profit agency. The contract further assigns the National Center the responsibility of reviewing applications and making recommendations to the State Board of Health regarding which entities should receive funding from the program. Further, the National Center is responsible for providing outcome and benchmark reports to each site, as well as an annual report to the Department including an evaluation of statewide program implementation and outcomes.

INVEST IN KIDS

Invest in Kids is a non-profit Colorado organization whose mission is to partner with communities to improve the health and well-being of young children, especially those from low-income families. In 1999, Invest in Kids was funded by the Colorado Trust to help bring the Nurse-Family Partnership program to Colorado communities. Invest in Kids was also involved in drafting the legislation for the Nurse Home Visitor Program. Invest in Kids works to advise communities of the opportunity to apply for funding from

the Nurse Home Visitor Program and currently has a presence in 57 of Colorado's 64 counties.

As mentioned previously, Invest in Kids has assumed certain responsibilities initially assigned to the National Center by the statute. Invest in Kids is responsible for initiating regular contact with each site, offering direction in the use of information system reports, and coordinating national quality improvement initiatives in Colorado. Invest in Kids also provides all site development work and serves as the primary contact for agencies regarding program implementation.

The agencies identified above are involved with the administration and evaluation of the program. The following section describes the sites in Colorado that provide the direct services to the woman and her child.

LOCAL PROGRAM SITES

Entities that wish to deliver the Nurse Home Visitor Program in their communities are chosen through a competitive grant process. Sites submit applications to the Department; and the Department reviews and forwards the applications to the National Center. The National Center has identified the characteristics of successful Nurse-Family Partnership programs and has developed application evaluation criteria on the basis of those characteristics. After evaluating the applications, a committee of three National Center staff forwards funding recommendations to members of the State Board, who make the final funding decisions. After the initial grant award, sites must submit an annual progress report and budget proposal to the Department and the National Center in order to be considered for continued funding.

According to the Nurse-Family Partnership model, sites are typically funded to serve 100 clients. However, waivers have been granted to serve fewer clients in more sparsely populated areas, as allowed by statute. Further, after the initial grant cycle, sites can also apply for expansions to serve more than 100 clients. The model for a typical 100-client site includes funding for a half-time nurse supervisor, four full-time nurses, and a half-time data entry clerk. Sites funded to serve fewer clients adjust their staffing needs accordingly.

Since the State began using tobacco settlement monies to fund the Nurse Home Visitor Program in Fiscal Year 2001, it has awarded 16 local sites operating 17 programs a total of $12.5 million in grant funding, including grants awarded for Fiscal Year 2003. As of March 1, 2002, tobacco-settlement funded sites have served a total of 1,302 women. It should be noted that, as early as July 1999, the Nurse-Family Partnership was present in Colorado. Prior to the availability of tobacco settlement funds, five sites were in operation. To date, there have been approximately 220 women enrolled in programs

through these sites that continue to be funded by sources other than tobacco settlement monies.

Table I below lists each funded site, when tobacco settlement funding was first received, the number of clients the site is funded to serve, the current caseload at the site, and the total number of clients served by the program since its inception through March 1, 2002.

Table I. Colorado Nurse Home Visitor Program Sites
Selected Funding and Client Data
March 1, 2002

Site	Date Received Tobacco Funding	Currently Funded Caseload	Number of Active Clients	Total Clients Served[1]
Boulder County Health Department	July 2002	100 clients	N/A[2]	N/A[2]
Denver Health & Hospital Authority	January 2001	100 clients	86	102
El Paso County Health Department	January 2001	100 clients	77	90
Jefferson County Department of Health	January 2001	100 clients	100	142
Jefferson County Department of Health (Expansion)	July 2002	100 clients	N/A[2]	N/A[2]
Larimer County Department of Health and Environment	July 2001	100 clients	75	117
Mesa County Health Department	January 2001	100 clients	102	149
Montrose County Public Health	January 2001	75 clients	48	65
Northeast Colorado Health Department	July 2002	50 clients	N/A[2]	N/A[2]
Northwest Colorado Visiting Nurse Association	January 2001	50 clients	27	38
Prowers County Public Health Nursing Service	July 2001	50 clients	36	38
Pueblo Community Health Center	January 2001	100 clients	74	107
San Juan Basin Health Department (25 client expansion funded July 2001)	January 2001	125 clients	100	174
Summit County Public Health Nursing	January 2001	100 clients	70	91
Tri-County Health Department	January 2001	100 clients	48	63
Valley-Wide Health Services, Inc.	January 2001	100 clients	52	59
Weld County Health Department	January 2001	100 clients	65	67
	Total:	**1,550**		

Source: Pacey Economics Group's review of local sites' applications and progress reports.

Notes:

[1] The number of clients is cumulative and includes all individuals served since inception.

[2] These sites were recently funded and, therefore, were not operational as of March 1, 2002.

As can be seen in Table I, some sites had not yet met their caseload objectives as of March 1, 2002. The counties having the most trouble filling their caseloads include those in rural areas of the State where the eligible population is spread over a large geographical area. We discuss the issue of site caseloads further in Chapter 1.

Appendix A includes a state map provided by the Department that illustrates the counties served by each of the 17 programs.

Program Funding

Section 24-75-1104, C.R.S., sets forth the funding formula that is used to determine annual appropriation amounts for all tobacco settlement programs, including the Nurse Home Visitor Program. The Nurse Home Visitor Program will receive an increasing amount of tobacco settlement funds, which began with 3 percent of total tobacco settlement funding in Fiscal Year 2001 (about $2.4 million) and is expected to end with approximately 19 percent of total funding (about $19 million) in Fiscal Year 2010 and thereafter.

Of the $2.4 million appropriated for Fiscal Year 2001, about half ($1.4 million) was awarded through grants because the grant cycle for the first year covered only half of the fiscal year (January through June 2001). About $800,000 of the Fiscal Year 2001 appropriation was rolled forward and used for grants in Fiscal Year 2002. Thus, the total amount allocated for the program for Fiscal Year 2001 was approximately $2.2 million. The remaining funds were returned to the tobacco settlement trust fund.

The goal of the legislation outlined in the statute is to make the program available to all low-income, first-time mothers in the State by the year 2010. As stated previously, each year funding is scheduled to increase by 2 percent, up to a maximum of 19 percent of the total tobacco settlement funding in Fiscal Year 2010 (approximately $19 million) and for each year thereafter. Table II identifies each site's funding since the Nurse Home Visitor Program began in Fiscal Year 2001.

Table II. Nurse Home Visitor Program Funding by Site			
Site	**FY 2001 (January-June 2001)**	**FY 2002**	**FY 2003 Approved Budget**
Boulder County Health Department	N/A	N/A	$395,614
Denver Health & Hospital Authority	$231,558	$448,775	$408,662
El Paso County Health Department	$167,694	$273,844	$391,723
Jefferson County Department of Health	$194,097	$383,297	$398,567
Jefferson County Department of Health (Expansion)	N/A	N/A	$394,184
Larimer County Department of Health and Environment	N/A	$42,250	$177,729
Mesa County Health Department	$172,105	$348,036	$395,205
Montrose County Public Health	$182,659	$337,531	$292,935
Northeast Colorado Health Department	N/A	N/A	$202,360
Northwest Colorado Visiting Nurse Association, Inc.	$120,745	$195,974	$229,388
Prowers County Public Health Nursing Service	N/A	$238,797	$255,172
Pueblo Community Health Center	$154,191	$420,271	$383,137
San Juan Basin Health Department (25 client expansion funded July 2001)	$195,913	$358,936	$395,726
Summit County Public Health Nursing	$202,875	$404,367	$403,472
Tri-County Health Department	$195,276	$360,929	$365,980
Valley-Wide Health Services, Inc.	$176,731	$398,895	$410,157
Weld County Health Department	$175,831	$320,933	$342,758
Total	**$2,169,675**	**$4,532,835**	**$5,842,769**

Source: Nurse Home Visitor Program Annual Report, July 2000-June 2001, and approved site budgets for Fiscal Year 2003.

Average Funding Per Family Served

In Table III, we estimated the funding per family using the Fiscal Year 2003 budgets, assuming that each site will eventually serve the full caseload for which they were funded. As can be seen in the table, average tobacco settlement funding per family varies by site between $3,166 and $5,103, or about $1,900 (excluding the Larimer County site, which receives over half of its funding from non-tobacco settlement sources). Reasons for this variance include a site's implementation stage, its location, and its size. For example, staff at new sites have to budget for startup costs such as training, teaching materials, and computer systems. Nurses at sites in rural areas of the State have much higher travel expenses for home visits and trainings, whereas sites in urban areas may have to fund higher salaries for nurses. Additionally, some sites have had to fill a single

nurse visitor position by hiring two part-time nurses; this increases a site's costs because two nurses require more supervision and training than a single nurse. Finally, although a small site (with a caseload of 50 or 75 clients) may not need as many nurses as a larger site, every site has to fund a nurse supervisor, a data entry clerk, and the startup costs of the program. The budget figures in Table III also include indirect costs that can be charged by the sites to the program.

Prior to budget approval and funding, the Department and the National Center review each budget request line by line. In the past, the Department and the National Center have denied funding for certain items in the budget or added funding to a budget if the site did not request enough (e.g., to cover travel to required trainings). Total funding allocated for the program for Fiscal Year 2003 from tobacco settlement monies amounts to $5,842,769. Thus, average funding per family for the Colorado program amounts to $3,770 per year.

Table III. Funding Per Family Per Year for Fiscal Year 2003

Implementing Agency	Anticipated Caseload	Tobacco Settlement Monies	Other Funding[1]	Total Funding	Total Funding per Case	Tobacco Funding per Case
Boulder County Health Department	100	$395,614	$29,457	$425,071	$4,251	$3,956
Denver Health & Hospital Authority	100	$408,662	$129,013	$537,675	$5,377	$4,087
El Paso County Health Department	100	$391,723	$70,769	$462,492	$4,625	$3,917
Jefferson County Department of Health	100	$398,567	$156,624	$555,191	$5,552	$3,986
Jefferson County Department of Health (Expansion)	100	$394,184	$135,477	$529,661	$5,297	$3,942
Larimer County Department of Health and Environment	100	$177,729	$193,474	$371,203	$3,712	$1,777[2]
Mesa County Health Department	100	$395,205	$21,140	$416,345	$4,163	$3,952
Montrose County Public Health	75	$292,935	$0	$292,935	$3,906	$3,906
Northeast Colorado Health Department	50	$202,360	$22,448	$224,808	$4,496	$4,047
Northwest Colorado Visiting Nurse Assoc.	50	$229,388	$10,033	$239,421	$4,788	$4,588
Prowers County Public Health Nursing Service	50	$255,172	$22,575	$277,747	$5,555	$5,103
Pueblo Community Health Center	100	$383,137	$0	$383,137	$3,831	$3,831
San Juan Basin Health Department	125	$395,726	$12,791	$408,517	$3,268	$3,166
Summit County Public Health Nursing	100	$403,472	$17,457	$420,929	$4,209	$4,035
Tri-County Health Department	100	$365,980	$19,131	$385,111	$3,851	$3,660
Valley-Wide Health Services, Inc.	100	$410,157	$0	$410,157	$4,102	$4,102
Weld County Health Department	100	$342,758	$0	$342,758	$3,428	$3,428
Total	**1,550**	**$5,842,769**	**$840,389**	**$6,683,158**		
Funding per Family per Year		**$3,770**		**$4,312**		

Source: Approved local site budgets for Fiscal Year 2003.

Notes:

[1] Other funding sources include county or local agency funds and grants.

[2] The Larimer County Department of Health and Environment currently receives over half its Nurse Home Visitor Program funding from the Larimer County Interagency Network for Kids. Over time, this site will transition from its current funding arrangement and will ultimately receive all program funding from tobacco settlement monies.

We further discuss the variance in tobacco settlement funding per family in Chapter 1.

Program Status

As of March 1, 2002, there have been a total of 1,302 women enrolled in the Nurse Home Visitor Program. Prior to the availability of tobacco settlement funds, five sites were operating Nurse-Family Partnership programs using a variety of funding sources. Table IV identifies selected demographic information of all clients served through March 31, 2002, *regardless* of funding source.

Table IV. Selected Demographic Data for Nurse Home Visitor Program Clients as of March 31, 2002	
Median age of mother at enrollment	18.0 years
Median gestational age at enrollment	18.0 weeks
Ethnicity of clients enrolled*	
Hispanic	44%
Non-Hispanic White	41%
African-American	5%
Native American	3%
Asian	2%
Other/Mixed	6%
Median years of education	11.0 years
Percent married	17%
Median household income	$13,500
Percentage using financial assistance	
Food stamps	9%
Medicaid	73%
TANF	3%
WIC	69%

Source: Overview of Program Implementation for Colorado Sites, March 31, 2002, provided by the National Center.

* Note: Percentages do not add to 100 percent due to rounding.

The National Center is required to provide an annual report to the Department each year. The report includes a detailed analysis of the program, including demographic information on the families served, as well as an evaluation of how program outcome measures compare to those identified in the Denver clinical trial conducted by Dr. Olds. Since the report for Fiscal Year 2002 is not due until October 2002, the latest report available reflects data from initiation through June 30, 2001. Given the relatively recent implementation of the program in Colorado, the present quantitative data provide only pregnancy and birth outcomes and nothing of a longer-term nature. The report submitted to the Department for Fiscal Year 2001 identified program accomplishments that include a reduction in the number of women who continue to smoke cigarettes during pregnancy and a reduction in the rate of low birth weight infants born to program participants (4 percent). This rate of low birth weight infants is lower than the rate for the State as a whole (8.4 percent).

Audit Scope and Methodology

We reviewed documentation and interviewed personnel for the Nurse Home Visitor Program at the Department of Public Health and Environment with respect to program policies, procedures, operations, and oversight. We interviewed individuals from the National Center, Invest in Kids, and each of the program sites. We also conducted a survey of the program sites which included a number of questions regarding the overall administration of the program, the application process, budgeting issues, and reporting requirements. The following chapters describe in detail the major audit findings and the corresponding recommendations.

Eligibility Determination and Program Oversight

Chapter 1

This chapter discusses several issues surrounding who is eligible for the Nurse Home Visitor Program in Colorado and how the Department of Public Health and Environment monitors local program operations and caseloads.

Income Criteria

The Nurse Home Visitor Program was implemented to serve first-time low-income mothers. When enrolling a client, sites must determine whether the income of the prospective client is within the requirements outlined in the statute. Section 25-31-104(2), C.R.S., states that a mother shall be eligible for the program if her gross annual income does not exceed 200 percent of the federal poverty level. In Calendar Year 2002, women earning $23,880 or less qualified for the program.

Women frequently learn about the program through a health care provider or a staff member at another community program. These individuals usually assess the woman's eligibility for the Nurse Home Visitor Program before referring her to the local program site. However, it is the site's responsibility to actually enroll the client. In some instances sites do not need to independently verify a woman's income level for the program. Clients who have already been deemed eligible for certain government programs with income requirements that are more restrictive than those of the Nurse Home Visitor Program automatically qualify. For example, any woman who is eligible for Medicaid is automatically eligible for the Nurse Home Visitor Program because the income limit for Medicaid is 133 percent of the federal poverty level, which is lower than the program's limit of 200 percent.

If a woman does not qualify for a government program with more restrictive income requirements, then the site is responsible for determining her eligibility with respect to income. During the interviews conducted while visiting each site, we found that the sites are utilizing different approaches to determine eligibility. That is, some sites base eligibility on the woman's income only, while others include the spouse's income, and still other sites base eligibility on household income including the parents' income if the prospective client is a teenager. This inconsistency, i.e., whose income to include for eligibility purposes, was also found on some of the referral forms utilized by the sites. Care providers use these forms to refer prospective clients to the program.

Utilizing different income criteria creates inconsistencies in eligibility for the program across sites in Colorado. For example, during our interviews with the sites, we learned that one site turned away a teenage woman because, with her parents' income, her total family income was above 200 percent of the federal poverty level. Had this teenager sought services at a site that utilizes only the woman's income (the correct way to determine eligibility according to law), she would have likely received services.

Some of the confusion regarding whose income to include for eligibility purposes may stem from the National Center's request for household income information for data monitoring purposes. The National Center's research incorporates information regarding the socioeconomic circumstances of the clients and, therefore, each client is asked to provide information regarding the income level of her household. It may not be clear to the sites that this information is for ongoing monitoring of the program rather than for eligibility purposes. Regardless of the source of confusion, the Department needs to work with the local program sites to ensure that statutory eligibility requirements are followed.

Gestational Age at Time of Enrollment

According to the National Center, the clinical trials provided evidence that the Nurse-Family Partnership model produces the most beneficial outcomes if a woman is enrolled in the program prior to 28 weeks gestation. This is illustrated by the fact that one of the three major goals of the model is improving maternal health behaviors while the woman is pregnant. If a woman is enrolled late in pregnancy or after delivery, the impact of the program is lessened significantly. Therefore, enrolling a woman in the program prior to the 28th week of her pregnancy is the criteria utilized by the National Center for eligibility nationwide.

However, statutes governing the Nurse Home Visitor Program are less restrictive than the Nurse-Family Partnership model regarding the gestational age at which women can be enrolled. Section 25-31-104(2), C.R.S., states that "…a mother shall be eligible to receive services through the program if she is pregnant with her first child, or her first child is less than one month old…." Program rules passed by the State Board of Health more closely reflect the model by stating that preference will be given to women who enroll in the program prior to the 28th week of pregnancy. Although deviation from the model will affect client outcomes, statutes clearly intend for the Nurse Home Visitor Program to be available to a wider population. Therefore, it is important that the Department ensure that sites are following statute when determining whether a woman is eligible for the program. Because the program rules are more restrictive than the statute, we believe that they should only be invoked if capacity concerns exist. Until the program is running at full capacity, no woman should be turned away as long as she meets the eligibility requirements set in statute (i.e., her child is less than one month old).

Information is not available regarding how many, if any, women have been turned away or dissuaded from the program on the basis of gestational age. However, some of the staff members we interviewed reported that they have been criticized for enrolling a woman who was past 28 weeks gestation. Although the program rules state that a preference should be given to women who enroll prior to 28 weeks gestation, the programs at these sites were not operating at full caseload at the time. To explore the impact of the expanded eligibility requirement, the outcome data, when it becomes available, could be stratified between those women who were enrolled when they were less than 28 weeks pregnant versus those who were enrolled after that time frame.

Given that the statute states that a client may be enrolled up to one month post-partum, we reviewed various program materials to ensure that they were consistent with the language in the statute. More specifically, we reviewed documents produced by the sites that outline the eligibility for the program to clients and outside care providers, such as site brochures and referral forms. Several of these documents state that to be eligible for the program a woman must be less than 28 weeks pregnant. Since this is in direct conflict with what the statute dictates, our view is that the sites and potential clients are receiving mixed directives regarding eligibility criteria. A site brochure or referral form may be the only piece of information that a prospective client or referring care provider has that states eligibility information. Therefore, these documents need to accurately reflect the eligibility requirements as stated in the statute.

Age of Woman at Time of Enrollment

Denver Health & Hospital Authority (Denver Health) operates two programs based on the Nurse-Family Partnership model. In October 1999, Denver Health was officially approved as a site for the Nurse-Family Partnership program using local funding. The program operates under *Denver's Best Babies Initiative* and targets women from specific high-risk neighborhoods.

In January 2001, Denver Health was given approval to operate a tobacco settlement-funded Nurse Home Visitor Program (of 100 additional clients) in addition to the *Denver's Best Babies Initiative* program. During our audit, we learned that the Nurse Home Visitor Program at Denver Health is limited to adolescents age 19 and under. This restriction is in conflict with the program statute. That is, the statute and rules governing the program do not restrict services on the basis of a woman's age. Although we do not have detailed information regarding whether this site has turned away potential clients, the age restriction needs to be removed from the program at Denver Health. Since the statute does not govern programs that are locally funded, Denver Health can place age restrictions on the *Denver's Best Babies Initiative* program as long as it is not funded with tobacco settlement funds.

Recommendation No. 1:

The Department of Public Health and Environment should work with the local program sites, Invest in Kids, and the National Center for Children, Families, and Communities to ensure that the Nurse Home Visitor Program is implemented in accordance with the eligibility requirements established in statute.

The Department should ensure that when determining eligibility sites consider only the client's income and do not restrict eligibility on the basis of her age or the gestational age of her baby. Additionally, the Department should ensure that all referral forms and applications for the Nurse Home Visitor Program clearly document eligibility requirements that match those established in statute.

Department of Public Health and Environment Response:

Agree. A written directive that reiterates that eligibility is based on the client's income and should not be restricted by age or length of gestation will be sent to all programs in September 2002. In addition, the program sites will be instructed that their brochures and referral materials should not state a gestational length of pregnancy, as this may be understood as a cut-off point for eligibility for the program. The written notice will be sent in September 2002. Local sites will have until November 1, 2002 for full implementation to allow time for the printing of new materials, where needed.

It should be noted that the program that limited its enrollment to women under 19 years of age did so to further target the resources of this program to the very high-risk pregnant teens within the low-income, first-time pregnant women. Nevertheless, they will be advised that they need to discontinue the age restriction immediately.

Documentation and Verification of Income

During our audit, we found that the Department does not require local program sites to document or verify client eligibility. Frequently, a woman provides eligibility information during the referral process. Care providers who refer women to the program typically fill out what is called a referral form. However, potential clients do not sign the referral form attesting to the truthfulness of the information listed, and they do not complete an application for the program. Department staff explained that public health programs generally prefer to provide services for individuals who appear in need of those

services, rather than requiring extensive documentation of that need. That is, they prefer not to ask a lot of intrusive questions or require the individuals to sign a lot of forms. However, the statute specifies income eligibility requirements for the program; and, therefore, we believe the sites need to develop a process to ensure that they can prove their clients meet the program eligibility requirements.

In order to ensure that all enrolled women are eligible for program services, the Department needs to develop an application process that includes documentation of income. The process should document whether the woman is employed, her gross income (if any), and her eligibility for other government programs that would automatically qualify her for the Nurse Home Visitor Program. If the Department chooses to use an application form as part of this process, the form should include space for the woman's signature as an attestation of the truthfulness of the information provided. In order to ensure accuracy, local program staff should verify her income to the extent possible. Verification could include obtaining a current pay stub, making a phone call to her employer, or verifying that the woman is participating in a more restrictive program (e.g., making a copy of her current Medicaid card).

Recommendation No. 2:

The Department of Public Health and Environment should develop an efficient application process through which potential clients document their income or attest that they receive no income. Local program sites should develop procedures to verify the reported income to the extent possible.

Department of Public Health and Environment Response:

Agree. A standard form will be developed and guidance will be written to assist local programs to verify and document each client's eligibility for the program. This will be fully implemented by March 1, 2003.

Program Oversight

Multiple entities serve in an oversight role for the Nurse Home Visitor Program. For example, statutes specify that the State Board of Health and the Department of Public Health and Environment must monitor the operation and effectiveness of all tobacco settlement programs, including the Nurse Home Visitor Program. In this section, we discuss oversight and monitoring of the Nurse Home Visitor Program specifically, not the Department's oversight responsibilities related to all tobacco settlement programs. Further, statutes require the National Center to monitor and evaluate the implementation

of the Nurse Home Visitor Program. The National Center's specific responsibilities are outlined in its contract with the Department and include reviewing site applications, making funding recommendations to the State Board of Health, and evaluating the performance of the program at the local sites. The National Center has delegated some of these responsibilities to Invest in Kids. For example, Invest in Kids is responsible for using performance and outcome data tracked by the National Center to provide ongoing assistance to local sites in meeting program goals.

During our review of the contracts between the Department, the National Center, and Invest in Kids, we found that although the National Center is responsible for monitoring the effectiveness of the Nurse Home Visitor Program the Department is still responsible for monitoring the operations of local program sites to ensure that the program is implemented in accordance with statutory guidelines and program rules. Although the National Center and Invest in Kids appear to be sufficiently monitoring program effectiveness, we believe that improvements are needed in the Department's oversight of program operations.

For example, none of the National Center's responsibilities, as outlined in the contract, require it to monitor operational and statutory compliance issues like eligibility determination. As such, the Department has a responsibility to monitor compliance in this area. Considering the issues we previously described related to eligibility determination and an additional issue we identified related to caseloads (described below), we believe the Department needs to more aggressively monitor the operations of the Nurse Home Visitor Program at the local site level or amend its contract with the National Center so that it performs this function. We believe that the Department could implement basic quality assurance procedures over site operations that could easily be monitored through periodic reporting or other means. For example, in order to test the eligibility of program beneficiaries, the program manager could randomly select client records to be tested from the data maintained by the National Center. The program manager could then ask sites to share their documentation of these selected clients' eligibility. In order to test the income criteria utilized by each site, the manager could request the documentation utilized by the site to determine eligibility and market the program. By reviewing the marketing materials, applications, referral forms, and eligibility determination guidelines utilized by each site, the Department could better ensure sites' compliance with statutory requirements regarding eligibility and other operational matters.

Local Program Site Caseloads and Budgets

A second area in which we believe additional oversight is needed is the area of program funding and caseloads. As discussed previously, we identified several sites that are not yet operating at full capacity. That is, the site has not filled all the program slots for which state funding was received. More specifically, as of March 1, 2002, seven sites had not met their target enrollment despite having been in operation for over 12 months.

Additionally, the National Center reports that attrition is a major concern for the program at several sites. At four of the local program sites, the cumulative attrition rate averages 49 percent by the child's first birthday. Attrition of participants during pregnancy, 16.4 percent, is also high across all sites. (Participant attrition during pregnancy in the Denver trial was 7 percent.) Finally, as we show in Table III, the local program sites average $3,770 in tobacco settlement funding per family. Tobacco settlement funding per family varies from site to site by about $1,900. We outline several reasons for this variance in the Description chapter of this report. For example, sites in rural areas of the state experience much higher travel costs than sites in urban areas. However, some of the sites with higher than average tobacco funding per family are also the sites with low caseloads and high attrition. Considering these findings, we believe it is important that the Department understand as completely as possible why site budgets and expenditures vary as they do.

State statute specifies that local sites are subject to a reduction in or cessation of funding if the State Board of Health, on the basis of recommendations from the National Center, determines that the site is not operating in accordance with the program requirements or is not demonstrating positive results. Given the difficulties experienced by some sites in reaching full capacity and maintaining attrition rates at acceptable levels, the Department should carefully monitor site caseloads and attrition rates to determine whether the State should continue to fund certain sites at current levels or if other measures are needed to increase program participation. Additionally, the Department should establish criteria that will assist the Department and the State Board to determine whether funding should be reduced or ended for a particular site. Criteria could include factors such as site caseload, attrition, location, stage of implementation, and the outcomes of the women and children the site has served.

Recommendation No. 3:

The Department of Public Health and Environment should develop and implement more aggressive monitoring of local site operations or amend its contract with the National Center so that it performs this function. Monitoring should ensure that sites implement the Nurse Home Visitor Program in accordance with statutory guidelines and program rules. Additionally, the Department should monitor site caseloads and evaluate options for handling sites that do not maintain caseloads that match their capacities.

Department of Public Health and Environment Response:

Agree. The Department will work with the National Center to more effectively monitor operational effectiveness. The monitoring methods will be put in place either directly by the Department as of December 1, 2002, or by the National Center upon amendment of the contract with the Department, also effective

December 1, 2002. The Department will also consult with the National Center to develop criteria (including consideration of such factors as attrition, location, stage of implementation and outcomes) to determine if a site's funding should be reduced or discontinued when caseloads do not match the local program's commitment via contract. Information regarding these criteria will be incorporated in the materials for the grant application process that begins in January 2003 and in the contracts that become effective July 1, 2003.

Fiscal and Information System Issues

Chapter 2

Administrative Costs

The Department provides local sites with a sample budget to assist them in developing their individual program budgets. The sample budget includes a detailed narrative outlining the anticipated costs directly associated with providing services under the program, including salaries, materials and supplies, training, computer systems, and mileage and travel expenses. The Department requires that the sites explain in writing any significant variance in their budget items from those identified in the sample budget, and, with assistance from the National Center, Department staff review each budget line item to determine the appropriateness of each cost submitted by the site. If Department staff determine a cost is inappropriate, they will make an adjustment to either reduce funding for a line item or to add funding if a site neglected to account for necessary costs.

We believe the Department has provided sufficient guidance to the sites about how to complete their budgets and does sufficiently review each budget to determine the appropriateness of most items. However, the Department has not yet implemented an effective mechanism to track and evaluate the administrative cost portion of the site budgets. Administrative costs are those costs necessary to implement a program but not linked directly to the provision of services. Administrative costs may include rent, utilities, and certain indirect costs like accounting services. Statutes do not establish limits on the amounts that sites may spend on administrative costs. By analyzing the administrative costs reported by each site, the Department can work toward establishing guidelines for minimizing these costs. For example, the Department could set a limit, such as 10 percent, on the amount of the total program budget that may be applied to administration, unless Departmental approval is obtained for additional costs. Keeping administrative costs low is important to ensure that adequate funding is available for direct service costs such as nurses' salaries and travel-related expenses.

We also found that the Department's current budget process for the sites does not ensure that all costs associated with operating a program are reported to the Department. For instance, some local programs directly charge the Nurse Home Visitor Program for facility rent, while others may receive office space as an "in-kind" contribution from the agency that houses them. Moreover, some sites will list the value of this contribution in

their budget as funding from another source, but others do not document this funding in their budget. Hence, site budgets do not consistently document all sources of program funding and therefore do not capture total program costs. Without tracking total program funding at each site, the Department cannot calculate the actual total cost of running the program. The program rules specify that Nurse Home Visitor Program grants are to cover the reasonable and necessary costs of administering the program. Unless the Department understands the true costs associated with operating the program at each local site, the Department and the State Board of Health cannot determine whether a particular site's budget includes reasonable and necessary costs.

Finally, our review of site budgets also revealed calculation errors related to indirect costs. For example, the maximum allowable indirect cost figures for some sites were calculated using a base that was inconsistent with that site's indirect cost agreement with the Department. Mathematical errors were also present. Department staff explained that these errors were largely the result of the extremely short time frame for reviewing, modifying, and forwarding the budgets to the State Board of Health. Specifically, Department staff had to perform all of the calculations and paperwork in approximately 24 hours. Staff reported that they are in the process of changing the time frame so that they will have about one month to perform the review and adjustments of the budgets in the future. We support the Department's effort to extend the time frame to a month and would also recommend that staff implement quality control procedures to ensure the accuracy of budgets prior to forwarding them to the State Board of Health.

Recommendation No. 4:

The Department of Public Health and Environment should improve oversight of program costs by:

a. Ensuring that local administrative costs for the Nurse Home Visitor Program are reasonable and necessary by improving its methods for tracking and evaluating the administrative cost portion of site budgets.
b. Capturing all cost information related to program operations, including in-kind contributions from the local entities.
c. Implementing a quality control process for ensuring the accuracy of budgets prior to forwarding them to the State Board of Health.

Department of Public Health and Environment Response:

a. Agree. The Department will develop a process to obtain and evaluate the administrative cost information for local site budgets. Implementation of this process will begin with distribution of modified budget guidance materials for

the grant application process that begins in January 2003 and will be included with the contracts that become effective July 1, 2003.

b. Agree. The Department will develop a process to capture all cost information related to program operations, including in-kind contributions, from local entities. Implementation of this process will also begin with distribution of modified budget guidance materials for the grant application process that begins in January 2003 and will be included with the contracts that become effective July 1, 2003.

c. Agree. The program will implement a quality control process for ensuring the accuracy of budgets prior to forwarding them to the State Board of Health. As the program has planned, the time frame for processing the applications will be extended, allowing time for the additional quality control steps, as recommended. This will be implemented with the next grant application cycle, beginning in January 2003.

Computer Information System (CIS)

The National Center tracks a large amount of data as part of the Nurse-Family Partnership model. The data are collected mainly by the nurses during the home visits and are entered into a Web-based information system by the local site's data entry clerk. The National Center maintains the system and utilizes the data entered to monitor client outcomes and compare the success of Colorado's Nurse Home Visitor Program to the benchmarks established during the clinical trials.

Training on the Web-Based System

Sites receive training on the Web-based information system from the National Center, and this training includes written documentation and two telephone conferences. Out of a total of 14 respondents to our survey, staff at five sites disagreed that the training clearly explains the Web-based system. More specifically, staff at some sites indicated that although the written documentation was beneficial, the telephone conference calls did not provide much additional assistance. Staff at several sites further suggested that the effectiveness of the training may depend on the technical knowledge of the data entry clerk.

Suggestions from the sites regarding the training on the Web-based system included in-person training for those who need it, in which the data entry clerk meets directly with the trainer and walks through data entry examples. Alternatively, either the Department

or the National Center could coordinate sending a less experienced data entry clerk to "shadow" a more experienced individual.

The data entered by the local sites are used by the National Center and the Department to document the success of the program, and it is essential that staff at the local sites are sufficiently trained on the Web-based system.

Data Accessibility

Using the Web-based system, local sites can run eight site-specific reports at their convenience. Most sites indicate that they run these reports monthly (following the National Center's recommendation), although a few sites indicate that they run them more frequently. These standard reports are used by the nurse supervisors to monitor program delivery at their sites and include information such as forms completed, content and length of visits, mileage traveled by nurses, demographics and health of client, and nature of visits.

The staff interviewed at nearly all of the sites agreed that these reports are helpful. However, they also indicated that they enter numerous data into the Web-based system that they cannot access later because they do not know how to retrieve it. Examples of these data include breastfeeding rates, birth weights, smoking cessation rates, phone calls from nurses to clients, client due dates, and client attrition. Although some of this information is provided to sites in benchmark reports from the National Center, the National Center does not issue these reports until a site has had 50 women deliver babies or once 50 families complete the infancy stage of the curriculum. As a result, a long period of time may pass before a site can access basic program data through the regular reporting process. The staff at the sites indicated that it would be helpful to have access to the information earlier and on a more regular basis. Further, because they cannot retrieve some of the data entered into the system, staff members at some sites are tracking that data in a separate computer file. This creates an inefficient process in which the data entry clerk is entering the data twice: once into the National Center system and once into a spreadsheet for use at the site.

Staff at the National Center explained to us that the raw data can be downloaded from the Web-based system in the form of a Microsoft Access database. However, the staff at the sites appear to be largely unaware of this process. Additionally, given the sophistication of the National Center system, a person would need strong skills in Microsoft Access in order to retrieve these data.

Tracking and reviewing data is an important piece of the Nurse Home Visitor Program. It is emphasized in the Nurse-Family Partnership model, and nearly all of the individuals we interviewed during our audit indicated that data collection is one of the strengths of the model. However, we found that there is a significant gap between the amount of

technical experience necessary to retrieve data from the Web-based system and the database skills of the data entry clerks.

Recommendation No. 5:

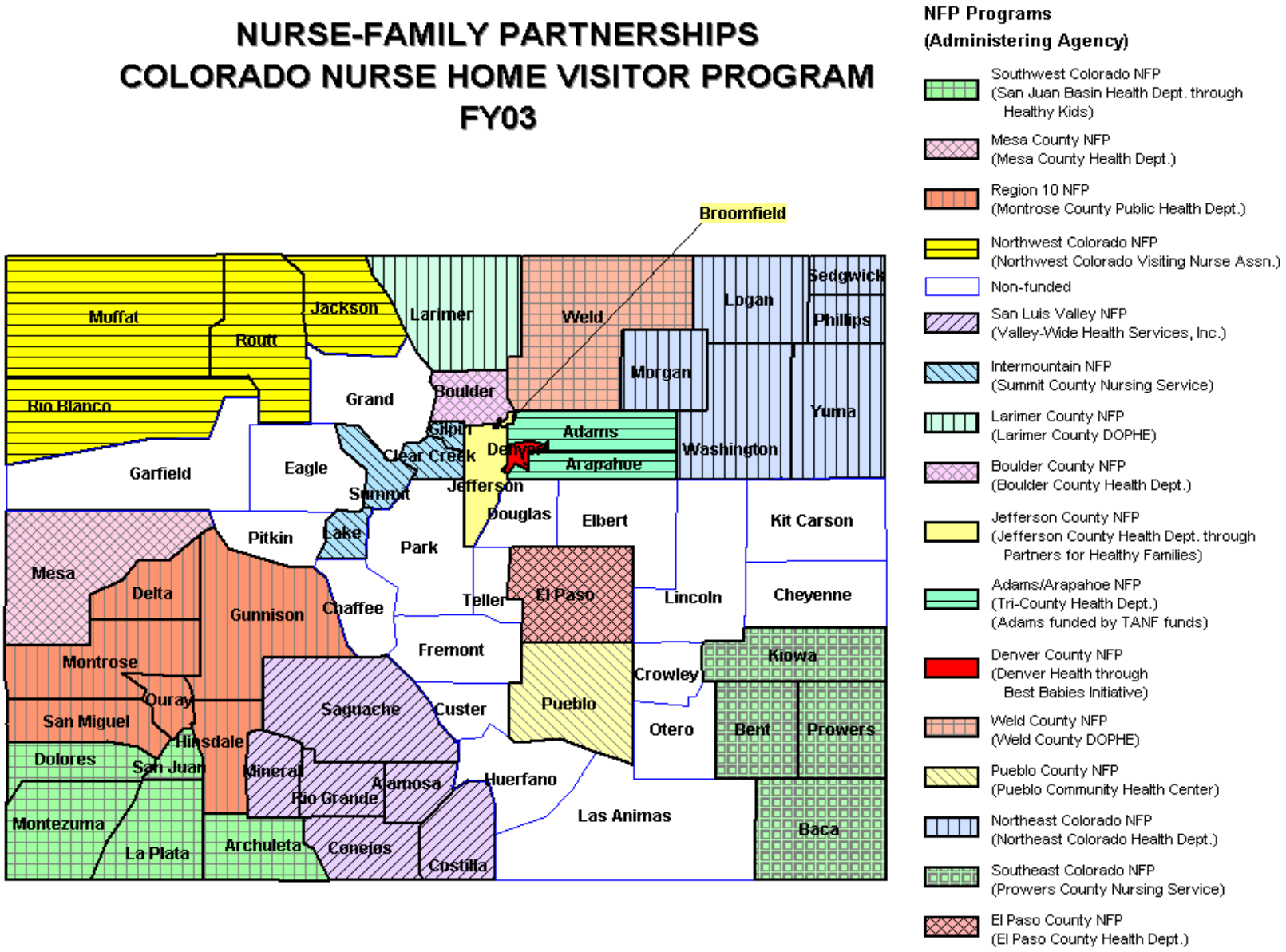
The Department of Public Health and Environment should work with the local program sites, Invest in Kids, and the National Center for Children, Families, and Communities to ensure that local program sites are sufficiently trained in both entering and retrieving data from the National Center's Web-based information system. If it is not possible to train sites on utilizing Microsoft Access, the Department should work with the National Center to make available additional standard reports that meet the needs of nurses and supervisors.

Department of Public Health and Environment Response:

Agree. The Department will work with the local programs, the National Center and Invest in Kids to ensure the necessary level of training is provided to ensure data entry and retrieval capacity. The Department and the National Center want the sites to make full use of the considerable amount of data that are already available to them by providing needed training and technical assistance for the data clerks as well as consultation for the nurse supervisors regarding the appropriate use of the data. The National Center will continue to work with the local sites, incorporating their input where possible, to improve the quantity and quality and the ease of use of the reports. The National Center will monitor the status of the local sites' abilities to submit and retrieve data and the use and usefulness of reports through monthly contacts with the sites and will report to the Department on the data use capacity status quarterly, beginning in January 2003.

APPENDIX

APPENDIX A



Source: Colorado Department of Public Health and Environment

Report Control Number 1435