

Public Assistance Reporting Information System Cost-Benefit Analysis –

FINAL REPORT

Submitted to:

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I. Introduction

In 2007, the Administration for Children and Families (ACF) of the U.S. Department of Health and Human Services (DHHS) contracted with Altarum Institute (Altarum) to conduct a cost-benefit analysis of the Public Assistance Reporting Information System (PARIS). The purpose of this study is to develop and populate cost-benefit models that can be used to assess the potential impact of PARIS on State program expenditures and integrity. The cost-benefit analysis for the PARIS project is a process by which estimates of savings are calculated from State activities to adjust or terminate client benefits as a result of information provided from PARIS matches. These savings are then compared to the costs of administering the program¹.

A. BACKGROUND

PARIS is a computer data matching and information exchange system administered by the ACF to provide States with a tool to improve program integrity in the administration of public and medical assistance programs. The PARIS project is designed to match State enrollment data from the Temporary Assistance to Needy Families (TANF) Program, the Supplemental Nutritional Assistance Program² (SNAP), Medicaid, and the recently added Worker's Compensation and Child Care Program with data from other participating States and from a selected group of Federal databases. Using the client's Social Security number (SSN) as the unique identifier, the files submitted by the States are matched against:

- ▶ *The Interstate match*, where Social Security numbers of public assistance clients are submitted by participating PARIS States and matched with data from all other participating States to determine if clients are enrolled in two or more States.
- ▶ *The Veterans match*, which provides States with information on the eligibility of their public assistance clients for veterans benefits and also allows States to determine if these clients are receiving income or medical assistance payments from the Department of Veterans Affairs (VA).

¹ The term "benefits" is used to both describe the type of analysis being conducted by Altarum (cost/benefit analysis) and to describe the payments made by the State to the client or to a provider on the client's behalf. To clarify the use of this term, we have made the distinction in the text that a "benefit" to the State refers to the total dollar amount identified through PARIS as an improper payment; and client benefits are the dollar amounts the State is paying out to the client or on their behalf.

² Formerly known as the Food Stamp Program

- ▶ *The Federal match*, which matches State data with information from the U.S. Department of Defense and the Office of Personnel Management to determine if clients are receiving income from any of these sources or are eligible for Federal healthcare coverage.³

States participate in PARIS on a voluntary basis, and they receive no ongoing funding from ACF for participation. States sign a PARIS Memorandum of Agreement (MOA), which requests that the State participate in a match at least once a year and requires that data be submitted in a standardized format.

In 2005 a study of the effectiveness of PARIS was conducted for ACF by Altarum, and the final report for that study was completed in 2007. One of the findings from that study identified the need for a consistent approach to calculating costs and benefits of PARIS across all States. The study concluded that the diversity of States approaches to PARIS, combined with a lack of tracking results, made it difficult to create a single uniform approach to calculating PARIS costs and benefits. However, models were developed that would allow States to use a consistent approach to calculating costs and benefits for specific PARIS activities, such as managing clients who moved from one State to another but did not report the move, or clients that did not report income from federal sources. This study is a follow-up to the prior study to determine if more accurate models could be developed if data were available to populate them.

B. PURPOSE OF THIS STUDY

The purpose of this study is to examine the extent to which financial savings could accrue to State agencies participating in PARIS if they were to take full advantage of its potential. The PARIS match process offers States multiple opportunities to improve program integrity by highlighting potential problems that may lead to identifying improper payments⁴. It furnishes information that can be used to make appropriate adjustments to benefits provided to a client. The matches also can result in improper payment avoidance due to case closures, the recovery of improper payments issued to clients in the case of fraud, and the coordination of medical insurance benefits between Medicaid and other Federally-sponsored health insurance coverage. These advantages are described more fully below:

- ▶ *Closing cases reported as active when a client has moved from one State to another, but has not reported the move (Interstate match)*. Most often Interstate matches result when a client moves from one State to another without reporting the move to officials in the original State of residence. Because the State from which the client has moved does not know of this relocation, they continue to issue benefits; both directly to the client in the case of the

³ Federal health care coverage could include benefits through such sources as coverage for current Federal employees, military health coverage through TRICARE, or benefits obtained through military or civilian retirement.

⁴ For purposes of this project, we are using the definition of an improper payment that was set by the Federal Office of Management and Budget for calculating improper issuance of client benefits. An improper payment is one that has been made in error, either because the person was not eligible to receive the payment, or because the amount of the payment was calculated incorrectly.

Supplemental Nutrition Assistance Program (SNAP) and TANF, or to a medical provider in the case of States using Medicaid managed care. Once a State identifies that a client has moved, they can then close cases for which it can be verified that the client resides in another State.⁵ Case closures help States avoid the issuance of future improper payments to TANF and SNAP clients and eliminate any payments for those clients to managed care organizations participating in the Medicaid program.⁶

- ▶ *Examination of potential dual participation for the purpose of detecting fraud and recovering overpayments (Interstate match).* One of the important uses of the PARIS Interstate match is to identify clients who may intentionally be receiving benefits in more than one State and to take appropriate action to recover potential duplicate benefits. States work together to examine matches where active cases show up in both States to determine if benefits have been issued to and redeemed by clients. If so, these States can take action to stop the duplication of payments, recover benefits through the issuances of an improper payment claim to the client, and possibly take legal action against clients for committing fraud and abuse.
- ▶ *Verifying income from the VA and other Federal sources (VA and Federal matches).* The VA and Federal matches provide States with information on client earnings classified by type and source of income from Federal employment databases and through payments to veterans made by the VA. By using data from the VA and Federal matches, local offices can verify whether or not income was reported, if it was reported accurately, and whether or not the income should have been counted in determining eligibility. The result of this verification can lead to an adjustment of benefit levels or to the discontinuation of benefits for clients whose income levels are in excess of eligibility requirements.
- ▶ *Coordination of benefits between Medicaid and other Federal insurance coverage (VA and Federal matches).* One of the more innovative uses of PARIS data is to ensure that the proper agency is covering the cost of a client's health insurance benefits. Some States use the VA and Federal matches to determine if clients are eligible for health insurance coverage provided through the VA or through the Federal military retirement system (TRICARE). If a client is eligible for both Medicaid and one or more of these Federal insurance programs, State Medicaid officials can work with these entities to coordinate the payment of benefits. This coordination results in savings to State Medicaid programs, particularly in cases where high-

5 All States have appeals processes that give clients who are removed from the program the opportunity to appeal the decision. In some cases, a client may be removed from the program, but be reinstated later if they successfully appeal the State's decision.

6 In some States, a problem was identified related to termination of Medicaid cases because of rules that allow Medicaid benefits to continue even when other program benefits have been terminated (Transitional Medicaid Services). This problem occurred in two States where TANF and SNAP were housed in a different department than Medicaid. Officials at local offices could terminate TANF and SNAP cases where it was shown that the client lived in a different State, but Medicaid could not make the same termination until a separate determination was made that the client was no longer eligible for Transitional Medicaid Services. The result is that capitation payments continued to be made to the managed care plan until the separate determination process was completed.

cost benefits such as long-term care are being provided, by shifting the cost of these services to the VA. Additionally, there is an advantage to transferring costs from Medicaid to VA for the families of veterans receiving long-term care benefits, as Medicaid requires the estate of the veteran to reimburse Medicaid for all or part of the costs of the long-term care⁷. Unlike Medicaid, the VA does not have the same requirement for veterans whose means would otherwise qualify them for Medicaid benefits.

Because PARIS just recently expanded the input file format to include the submission of data related to the Child Care Program and the Workers' Compensation Program, many States have not yet started submitting this information. For this reason, our analysis is limited to the assessment of costs and benefits as they relate to the SNAP, TANF, and Medicaid programs only.

C. CHALLENGE OF IDENTIFYING A PROPER PARIS “MODEL” FOR ESTIMATING SAVINGS

When examining the costs and benefits of a State program, one can often rely on a significant amount of commonality across States in order to compare activities and results. However, PARIS does not fit the mold of a typical “program,” in that it has no prescribed rules for scope of activities. It is up to each State to make the decision on how they will use PARIS data. This can be strength of the PARIS program, in that it allows States to prioritize and customize how they use PARIS to identify and solve problems, as well as providing flexibility in allocating their limited resources to those areas they believe to be most important. However, it is a challenge to compare State improper payment savings results since this variability creates unique features in some States that have no comparable results in other States.

The diversity of PARIS activities is reflected in four important factors that are inherent to its voluntary nature. These include:

- ▶ *Diversity in the number of programs for which data are submitted.* States can choose from which programs (SNAP, TANF, Medicaid) they submit data. Of the three primary programs, there is significant variation as to which data are submitted. Some States submit all of their TANF, Medicaid, and SNAP data, while others exclude one of these programs (usually Medicaid) because it is operated in a different department. Other States only submit data on clients receiving benefits in all three programs, and exclude “Medicaid only” clients. Still others focus primarily on Medicaid, and do not submit TANF or SNAP data.
- ▶ *Diversity in the types of matches for which data are submitted.* PARIS is composed of three primary matches, the Federal, Veteran, and the Interstate matches. States do not have to

⁷ Section 13612 of Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66) amended Section 1917 of the Social Security Act related to liens, penalties for uncompensated asset transfer and Medicaid estate recovery.

submit data for all of the PARIS matches. Some States submit for all three matches, while others only submit for the Interstate match, and do not submit for the Veteran or Federal match. Still others may submit for the Federal or Veteran matches (or both) and not the Interstate. If a State does not submit for the Interstate, then any clients that move into that State from another (and did not report the move) will not be identified, and thus their benefits will likely continue to be issued in both States.

- ▶ **Frequency of matches.** PARIS allows for States to submit data as frequently as once per quarter. However, some States have made the decision to submit less frequently (semi-annually or annually). This difference in frequency results in variability in the total number of PARIS matches produced nationally each quarter. For example, if State A submits quarterly, and contiguous State B submits semi-annually, State A will have two quarters each year where no matches will be recorded with State B.

Figures 1-3 below display the number of PARIS States that submitted data for each type of match, for each of the four quarters through August 2008.

Figure 1. Number of PARIS states participating in PARIS Interstate Match; by quarter

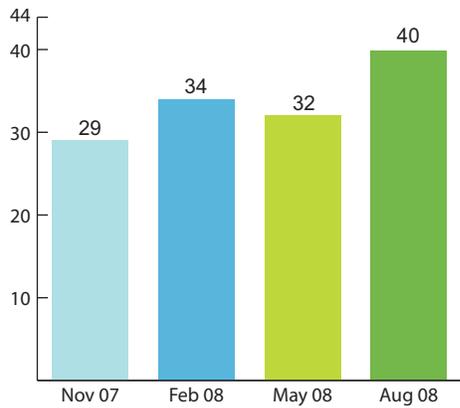


Figure 2. Number of PARIS states participating in PARIS Veteran Match; by quarter

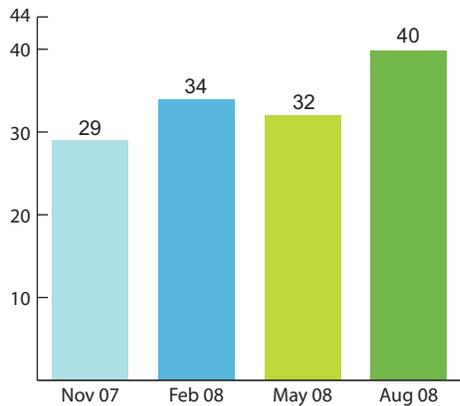
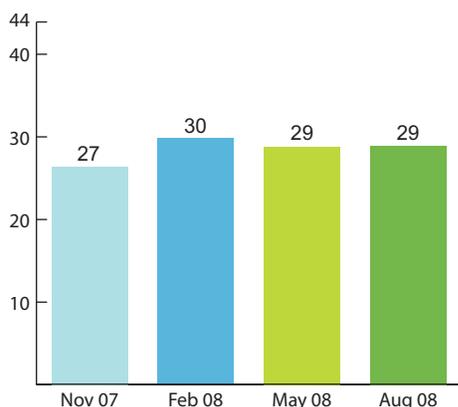


Figure 3: Number of PARIS states participating in PARIS Federal Match; by quarter



The combinations of State activity that are possible, given the variables discussed above, make it difficult to study “typical” PARIS program match results across States.⁸ Only 15 States report submitting data for all three primary programs every quarter for all three matches. These three factors contribute to the significant diversity of approach to the submission of data. However, there is one other factor that has the most significant impact on our ability to identify a typical PARIS project in a State.

- ▶ *Diversity in approach to conducting follow-up.* The key to success in PARIS is the follow-up activities conducted by States. If a State does not use the PARIS match data to its fullest potential, then the maximum benefits of participating in PARIS cannot be obtained. During the prior study of the effectiveness of PARIS, Altarum discovered that many States conducted limited or no follow-up to PARIS matches. For example, at the time of the prior study’s data collection (2006-2007) there were nine States that submitted data for PARIS, but conducted no follow-up activities. Several other States reported that they only used PARIS data to detect fraud, and did not follow-up on unreported moves. Still others conducted follow-up for some programs, such as TANF or SNAP, but did not conduct follow-up on Medicaid matches. Others only used data from the Veteran or Federal file to verify income. Only one State used PARIS data to coordinate long-term care benefits between Medicaid and the Veterans Administration. Finally, many States reported that they did not understand much of the data provided in the Federal file, so they did not work this file at all.

The reasons for not conducting follow-up activities fell into three key areas. First, some States reported that staff and resource limitations impacted their ability to conduct follow-up. Second, some States were very new to PARIS and did not have much experience working with the files. They failed to set up systems to sort, filter, or create usable reports for PARIS, so they became frustrated trying to work with the large files that PARIS creates. Finally, many States did not

⁸ All States are encouraged to submit for the August match, even if they only submit semi-annually or annually.

understand how the data could be worked, and thus passed the raw PARIS files down to local offices for follow-up. These local offices were either not prepared for working with such large files, did not understand the data, or did not see the information as a priority for them to work.

As can be seen, the diversity in the scope of PARIS implementation across States makes it a challenge to develop a single model for calculating benefits that allows comparisons between States. During our data collection for the effectiveness study, and through our work on this specific cost-benefit project, we were able to find examples of where PARIS States had developed strong systems that took full advantage of a component of PARIS activities. Because this study was charged with examining the cost and benefits of PARIS, we wanted to examine PARIS in the context of its full potential. We, therefore, concluded early on that simply reporting on a few State successes would not provide the type of information that would be helpful to ACF in examining the cost and benefit of PARIS, nor would it necessarily help States to understand the significant benefits that can be realized when they take full advantage of all PARIS has to offer.

We, therefore, took the approach that we would conduct this study as a prospective study of PARIS costs and benefits. We define prospective as an approach that examines potential results through the analysis of PARIS data files from States that agreed to participate in the study. We verify these results by comparing our analysis results with summary level-data from successful PARIS efforts in selected States. This allows us to build models for identifying PARIS results by type of PARIS activity which we believe truly reflected the “best” approaches that could be used to conduct PARIS data analysis and follow-up. By applying these models to the match results for each PARIS member State that submits data (number of matches returned to each State), we are able to create estimates of potential savings for individual States as well as national estimates of PARIS-related savings. Detailed steps in this analysis and model building are presented in Appendix A.

In the next sections of this report, we will present the methodology used for creating the models, present the results from the States that contributed data to the study, and present our national estimates of the potential for savings in the PARIS project.

II. Methodology

The methods to estimate the costs and benefits of PARIS involved a combination of information gathering from States, developing models by which data could be filtered and analyzed, and by analyzing raw PARIS match data from four States that agreed to provide data for analysis. In addition, summary-level data obtained from another group of States, interviews with State PARIS officials, and examination of “best practices” publications and results were used to build models to estimate outcomes. Using raw PARIS data files as the primary source of data for the analysis allows the application of a consistent process to identify public assistance recipients who should (1) have their benefits terminated because of an unreported move, or (2) adjusted because they did not report or underreported the income they receive from a Federal employer or from the Department of Veterans Affairs, or (3) be referred to the Coordination of Benefits Office because they are eligible for health insurance through their Federal employer or through the VA and they are enrolled in Medicaid. Costs are estimated from data provided by participating States and ACF.

As was noted earlier, our goal was to examine the potential for cost and benefits for the three primary PARIS matches, with all three major programs participating, and data submitted each quarter. In order to do this, each of the three match files required varying levels of preparation prior to the development of cost and benefit estimation. Overall, our approach involved processing raw data files from those States in the study as though we were in the position of State officials. To do so, the following activities were conducted:

- Identifying matches that require follow up
- Estimating potential results of match investigations and follow up
- Computing estimates of improper payment avoidance and issuance, and
- Comparing these estimates with estimates of what the States would spend to implement and process PARIS data and follow-up.

Details of the analysis required to conduct these activities are described in the following sections. Estimates of improper payment avoidance and issuance are presented in the Results section.

A. INTERSTATE FILE PROCESSING

Because the Interstate data file required extensive sorting and analysis in order to create the analytic files necessary for our models, the methods described in this section are presented without detail as to how the analysis was conducted. A detailed description the analysis methods used to process the Interstate file results is provided in Appendix A.

The Interstate file preparation consisted of two key steps. First, we eliminated erroneous or invalid matches by comparing key identifying information for each client between the matching States. If the first name, last name, and date of birth for a client did not match, then the match was removed from our analysis file.

Second, we identified clients who are likely to have moved out of our study States by examining the date of program enrollment for the client in each of the States. This subset represents the group of clients that are potentially eligible for benefit termination due to unreported moves and for whom, in the case of fraud, the State could potentially recoup improper payments issued. In the following sections we describe how the data were further analyzed to compute benefit estimates specifically for each of these activities.

Table 2-1 presents the total number of Interstate matches and the number and percent of valid matches and unreported movers.

Table 2-1. Number of August Interstate matches and the number of valid matches and unreported movers identified after applying filters.

		CO	KS	ME	NM
Development of analysis sample		N (%)	N (%)	N (%)	N (%)
TOTAL Interstate matches		6,057	2,926	1,633	3,211
(1) After filtering out erroneous matches...					
Valid matches		5,786 (96)	2,817 (96)	1,524 (93)	2,994 (93)
(2) After limiting to unreported movers...					
Unreported movers	TOTAL	1,838 (32)	767 (27)	282 (19)	1,132 (38)
	SNAP	564 (10)	125 (4)	46 (3)	147 (5)
	TANF	6 (<1)	8 (<1)	7 (<1)	6 (0)
	Medicaid	1,431 (25)	687 (24)	251 (16)	1,041 (35)

Closing cases due to unreported moves. For the purpose of identifying those cases that should be closed due to unreported moves, files were updated to eliminate clients that were either no longer active or who's certification period would end shortly. These are cases that have either closed since submitting the file for data matching, or that would naturally terminate within a 30-day period after the State receives the match file. Since States do not routinely include a projected benefit termination date, this was estimated by calculating the average length of time beneficiaries remain active in a program and applying this average to the clients' program start date one or more times, or until the estimated end date occurred beyond when benefits began in the other State. This date represents the first opportunity for a local field worker to identify a client that has moved to another State. More importantly, the clients identified through this

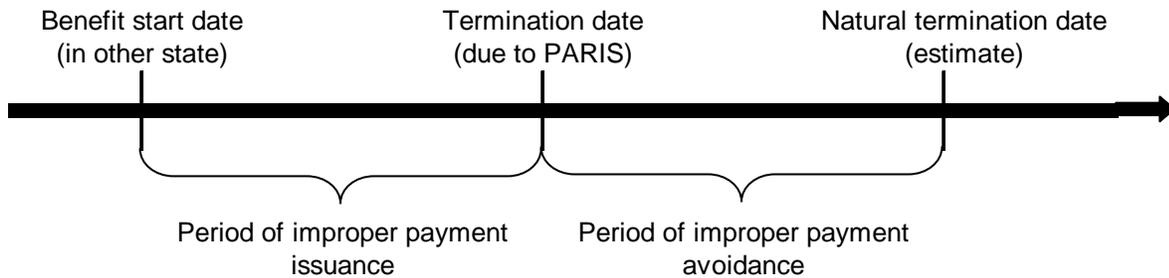
process represent the subset of matches that require follow up action, and thus, are the basis of our analysis and estimates. Table 2-2 presents the total number and percent of unreported movers that would be referred for follow up after screening out inactive cases.

Table 2-2. Number and percent of unreported movers that are referred for follow up because cases are still active.

After filtering out inactive cases...	Program	CO	KS	ME	NM	Average
		N (%)	N (%)	N (%)	N (%)	N (%)
Cases referred for follow up	SNAP	156 (28)	25 (20)	26 (57)	48 (33)	64 (28.8)
	TANF	4 (67)	1 (13)	4 (57)	2 (33)	3 (40.7)
	Medicaid	1,431 (100)	687 (100)	251 (100)	1,041 (100)	853 (100)

For each of the cases referred for follow up, the period of improper payment avoidance was calculated. As depicted in Figure 4, the period of improper payment avoidance is the time between benefit termination using the PARIS match and the estimated natural termination date – the end of the client’s certification period.

Figure 4. Timeframe for periods of improper payment avoidance and issuance.



Individual avoidance amounts were calculated by multiplying clients’ avoidance period by their benefit amount. Benefit amounts for SNAP and TANF are provided on the PARIS file. However, benefit amounts for Medicaid are not. This is most likely because State Medicaid programs tend to be a mixture of capitation and fee-for-service (FFS) programs, so determining the amount of benefits is not as straightforward as it is for SNAP and TANF. For the purposes of this cost-benefit analysis, we used data from a reliable, published source to identify the 2001 capitation

rates⁹ for each State, and we adjusted them using the urban-medical consumer price index¹⁰ (CPI) in order to estimate current rates (2008). We ignored the dollar value associated with fee-for-service programs on the assumption that if a client moved from the State and received medical care out-of-State, the submission of a claim would initiate an inquiry into the validity of the claim and the qualification of the benefit recipient.

Using the client-level improper payment avoidance amounts for all four of the study States described above, we calculated an average avoidance amount – the amount a State can expect to avoid by closing program benefits for an unreported mover, across for the four participating States for SNAP and TANF. Again, the average avoidance amounts are a per client benefit that could be realized by a State by closing program benefits for an unreported mover. Table 2-3 presents these amounts.

Table 2-3. Average avoidance amount for the SNAP and TANF Programs.

Program	SNAP	TANF
Average avoidance amount	\$1,528.36	\$2,418.91

To calculate improper payment avoidance amounts for Medicaid, the total number of Medicaid clients identified as unreported movers were multiplied by the average State capitation rates. Then these projected monthly savings were multiplied by an assumed 12-month avoidance period. Finally, the total was then adjusted to remove the likely number of clients who were not enrolled in a capitation plan, but rather received their services on a fee-for-service basis.

Identifying fraud cases. For the purpose of identifying fraud case and initiating fraud investigations, we limited the previously described analysis file of unreported movers to only those cases with an improper payment issuance period of more than 60 days. The period of improper payment issuance is the time between the start date of benefits in the other State and the date that benefits are terminated using the PARIS match (Figure 1). We assumed benefits would be terminated due to PARIS no later than 30 days after receiving the Interstate match file. If benefits were used in both States during this period, potential fraud should be investigated. Because we did not have information on the rate of fraud for each program in each of the study

9 Health Affairs, Exhibit 1, "Medicaid Managed Care Payment Methods and Capitation Rates," January/February 2003. Accessed November 11, 2008 on Kaiser Family Foundation website: <http://www.statehealthfacts.org/comparemaptable.jsp?ind=221&cat=4>. At the time of the survey, only 39 states including the District of Columbia offered Medicaid managed care using capitation rates. Of those, 36 responded to the survey. Nebraska, Oregon, and Tennessee declined to respond.

10 Consumer Price Index figures, which are based on information from the Bureau of Labor Statistics, were identified through the following website: http://www.buckconsultants.com/buckconsultants/Portals/0/documents/publications/newsletters/key_indicators/cpi.html

States, we did not attempt to quantify the number of fraudulent cases. Rather, we used the number of cases of benefit duplication (greater than 60 days) as the basis of our analysis. The number and percent of unreported movers that were issued improper payments as identified through the August 2008 Interstate match file are provided in Table 2-4.

Table 2-4. Number and percent of out-of-State movers for which improper payment issuance exceeded 60 days.

After filtering out movers with less than 60 days of benefit duplication...	Program	CO	KS	ME	NM	Average
		N (%)	N (%)	N (%)	N (%)	%
Cases issued improper payments	SNAP	294 (52)	88 (70)	49 (100)	146 (99)	65
	TANF	4 (67)	5 (63)	7 (100)	6 (100)	81
	Medicaid	1404 (98)	684 (100)	243 (97)	1019 (98)	98

Individual improper payment amounts were calculated by multiplying clients' improper payment issuance period by their benefit amount. Again, SNAP and TANF benefits amounts were provided on the Interstate file. Medicaid benefit amounts are previously published capitation rates that we adjusted. Improper payment issuance amounts were calculated by summing all individual level improper payment amounts by State.

B. VETERAN FILE PROCESSING

Income verification. As previously described, the Veteran match file is primarily used for two purposes. The most common use of the Veteran file is for income verification. This is a process by which States compare income reported to the State by the client to income the client is actually receiving according to the Veteran match file. In order to determine which cases on the Veteran file should be referred for follow up to verify income, the following steps were taken.

- First, we identified the subset of clients on the Veteran file that are receiving income from the VA using Veteran file data provided by three of our study States. On average, 82.7 percent of clients on the Veteran file are receiving income from the VA.
- Second, using data provided by New Mexico on reported income, we determined that 55.4 percent of individuals who receive income from the VA underreported or did not report VA income. This factor was used to estimate the number of cases in each of the three study States that would be referred for follow-up (Table 2-5).

Table 2-5. Number and percent of clients on the Veteran file that received VA income and the number of clients on the Veteran file who had under/unreported income, according to the August 2008 match data.

State	Total number of matches	Number of clients receiving income from the VA	Number of clients referred for follow up because under/unreported VA income (55.4%)
	N	N (%)	N
CO	3340	3306 (99.0)	1832
ME	3380	2474 (73.2)	1371
NM	1738	1408 (81.0)	780
Average	--	82.7%	--

In order to estimate State benefits related to working the Veteran match for the purpose of income verification, we used reconciled data provided by Oklahoma to develop multipliers that could be applied to the number of cases referred for follow-up to produce estimates of savings related to SNAP benefit termination and reductions and to Medicaid benefit termination. For SNAP, 22.8 percent of cases referred for follow-up were either closed or had benefits reduced, and the average savings is \$169.60 per case. For Medicaid, 2.4 percent of cases referred for follow-up were closed. Actual estimates of benefits and net savings are presented in the Results section.

Coordination of benefits. The second use of the Veteran match file is for the coordination of benefits between Medicaid and the VA. Although PARIS data from the Veteran file can be used to identify veterans whose dependents may be eligible for the VA health care program called CHAMPVA, we did not explore this activity in great detail because the Veteran file does not include information about those eligible dependents. Therefore, we could not determine if the veteran's dependents were enrolled in Medicaid, and thus, potentially eligible for the coordination of benefits. Instead, our analysis, with regard to the coordination of benefits, focuses on veterans that are 70 to 100 percent disabled and who are enrolled in Medicaid. These clients are eligible for long-term care services through the VA and could potentially be transferred from Medicaid to the VA. In order to determine which cases on the Veteran file should be referred for follow up for the purpose of long-term care benefit coordination we took the following steps. First, we identified veterans on all three State files that were rated 70 to 100 percent disabled based on their benefit type and amount.

Second, using data from New Mexico, Kansas, and Colorado, we determined that approximately 0.8 percent of veterans who receive income from the VA are 70 to 100 percent disabled and on Medicaid (Table 2-6).

Third, additional data fields provided by Kansas on veterans' living arrangements indicate that 2 out of 6 (33.3 percent) veterans in Kansas that are 70 to 100 percent disabled and enrolled in

Medicaid are living in a long-term care facility. Individuals included in this subset would be referred for follow up and can likely be transferred from Medicaid to VA for long-term health care benefits.

Table 2-6. Number and percent of clients on the Veteran match file that are 70 to 100 percent disabled and enrolled in Medicaid and the estimated number that are also living in a long term care facility, according to the August 2008 match data.

State	Number of clients receiving income from the VA	Number of Veteran rated 70-100% disabled	Number of Veteran rated 70-100% disabled AND who are enrolled in Medicaid	Estimated number of Veteran rated 70-100% disabled AND who are enrolled in Medicaid AND living in LTC facility
	N	N (%)	N (%)	N
CO	3306	44 (1.3)	11 (0.30)	4
KS	1818*	--	6 (0.33)	2
ME	2474	53 (2.1)	--	8
NM	1408	28 (2.0)	23 (1.3)	8
Average	--	1.7%	0.8%	--

* estimated by applying a previously described factor of 82.7 percent to the total number of matches received by Kansas on the August match

Benefit and net saving estimates are not provided for the coordination of long-term care benefits between Medicaid and the VA. The estimates provided in Table 2-6 on the number of veterans rated 70 to 100 percent disabled who are enrolled in Medicaid and living in a long-term care facility do represent the “eligible” population for benefit transfer. However, because so few States conduct this type of follow up there is very limited data on the cost to transfer veterans from Medicaid to VA and on the success rate. For this reason, we do not attempt to estimate the benefits of this activity.

C. FEDERAL FILE PROCESSING

Income verification. Like the Veteran match file, the Federal match file can be used for two purposes. The most common use of the Federal file is for income verification, which is, again, a process by which States compare income reported to the State by the client to income the client is actually receiving according to the Federal match file. In order to determine which cases on each of the study States’ Federal files should be referred for follow up for the purpose of income verification, we took the following steps. First, we identified erroneous matches and excluded them (4 percent). As with the Interstate file, matches were deemed erroneous if they mismatched on first name, last name, and date of birth.

Second, we identified the subset of clients on the Federal file (for valid matches only) that are receiving income from a Federal source. On average, 94 percent of clients matching on the Federal file are receiving Federal income (Table 2-6).

Third, based on data from New Mexico, 81.2 percent of individuals who receive income from a Federal employer are referred for follow-up because of unreported or underreported Federal income. The number of clients that would be referred for income verification follow up is provided in Table 2-7.

Table 2-7. Number and percent of clients on the Federal file that received income from a Federal employer, according to the August 2008 match data.

State	Total number of matches	Total number of valid matches	Number of clients receiving income from a Federal source
	N	N	N (%)
CO	1057	1012 (95.5)	940 (92.9)
ME	774	751 (97.0)	715 (95.2)
NM	729	692 (94.9)	641 (92.6)
AVERAGE	--	95.8%	93.5%

As previously described, we used reconciled data provided by Oklahoma for the Veteran file to develop factors that could be applied to the number of cases referred for income verification follow-up to produce estimates of savings related to SNAP benefit reductions and termination of SNAP and Medicaid benefits. These factors were also used to estimate outcomes for the Federal file. Again, for SNAP, 22.8 percent of cases referred for follow-up were either closed or had benefits reduced, and the mean savings is \$169.60 per case. For Medicaid, 2.4 percent of cases referred for follow-up were closed, based on data from Oklahoma for the Veteran file.

Computations of estimated savings from Medicaid case closure due to income verification use adjusted State-specific capitation rates.

Coordination of benefits. The second use of the Federal match file is related to updating third party liability information based on a client's eligibility for TRICARE or another Federal health insurance program. In order to identify individuals that should be referred for follow up for the purpose of coordinating benefits, we followed the first two steps described above to limit the file to valid matches and to clients who were receiving income from a Federal employer. Using information from the PARIS file on the type of employee record, we determined eligibility for TRICARE (active duty and retired military personnel) and for other health insurance programs (civilian Department or Defense and Office of Personnel Management employees). Additional data fields provided by New Mexico and Colorado allowed us to estimate that approximately

16.7 percent and 4.0 percent of individuals who receive income from a Federal source are potentially eligible for TRICARE or for other Federal health insurance, respectively, and are enrolled in Medicaid. The number of clients that would be referred for third party liability related follow up is provided in Table 2-8. Kansas does not submit for the Federal file match; therefore, they are excluded from this part of the analysis.

Table 2-8. Subsets of clients from the Federal file that would be referred for follow up due to under/unreported income or for coordination of benefits.

	Number of clients receiving income from a Federal source	Estimated number of clients referred for follow up because under/unreported Federal income	Number of clients referred for coordination of benefits because eligible for TRICARE and enrolled in Medicaid	Number of clients referred for coordination of benefits because eligible for Federal health insurance and enrolled in Medicaid
State	N	N	N	N
CO	940	763	161 (17.1)	17 (1.8)
ME	715	581	119 (16.7)*	29 (4.0)*
NM	641	520	106 (16.5)	47 (7.3)
Average	--	--	16.7%	4.0%

* estimated by applying average percentages to the number of clients receiving income from a Federal source

The benefit and net savings estimates related to updating third party liability information for clients that are eligible for TRICARE or another Federal health insurance program and who are enrolled in Medicaid are not provided. The estimates provided in Table 2-7 on the number of clients who are eligible for TRICARE or other health insurance through their Federal employer and who are enrolled in Medicaid do represent the “eligible” population for benefit transfer. However, because so few States conduct this type of follow up, there is very limited data on the percentage of these cases that would already have reported their enrollment in another health insurance program to the State, and thus, remain unchanged. Nor is their information on the cost to verify enrollment in another health insurance program and update third party liability. For these reasons, we do not attempt to estimate the benefit of this activity.

D. ANNUALIZED ESTIMATE COMPUTATIONS

Computed annualized benefit amounts for each State and nationally was more involved than simply multiplying the quarterly results based on the August 2008 match by four. We needed to account for redundant matches or matches that appear on subsequent quarterly matches. Clients would show up on subsequent Interstate matches for one of two reasons; either the local field worker did not work the case, thus their benefits remain open, or the local field worker followed up on the match and the client was determined to be eligible for benefits within the State, so their

case was not closed. If the former is true, then the redundant matches should not contribute more than once to the improper payment avoidance estimate as their benefits would only be closed once. If the latter is true, then the redundant matches should be removed from the file submitted to local field staff so that follow-up efforts are not duplicated between matches. This “filter” ultimately cuts down on unnecessary case worker workload.

Using an annual series of quarterly raw data files provided by two of the States that participated in our analysis, we analyzed PARIS match files over the course of an entire year. This analysis facilitated an estimate of the numbers of matches that are repeated in subsequent quarters and provided an indication of the rate at which cases of movers naturally age out of the system. Table 2-9 shows the non-redundancy rates (1-redundant percentage) by program, and by quarter, that were determined in this analysis and used for subsequent estimates for the Interstate match. The rates for TANF are 1.0 because low volume of matches referred for follow-up made computations unreliable. The non-redundancy rates tend to rise over time, and this is attributed to cases that would not naturally terminate within the next quarter, but would continue as an open case beyond the next quarter.

Table 2-9. Rates of non-redundant matches by quarter and by program.

Program	February 2008	May 2008	August 2008
SNAP	0.685	0.769	0.849
TANF	1.000	1.000	1.000
Medicaid	0.507	0.522	0.623

For the Veteran file and the Federal file, redundant match comparisons were limited by data availability to the May 2008 and August 2008 match results from States that participated in this analysis. For the Veteran file, only 7.5 percent of the valid records in the August match were not included in the May match. This suggests that once the Veteran file matches have been worked, the subsequent workload would be significantly reduced. For the Federal file, 28 percent of the valid match records in the August match were not included in the May match file. These rates were applied to the final benefit estimates to avoid overstating potential savings associated with income verification using the Veteran and Federal files.

In addition, these high rates of redundancy on the Veteran and Federal file are somewhat expected. State program clients match with VA and Federal databases in most cases because they are receiving income from the VA or from a Federal employer that will continue for an indefinite period of time. Therefore, as long as the client continues to receive program benefits from the State, they will continue to show up on each quarterly match file.

E. COST COMPUTATIONS

Cost computations are based on estimates provided by participating States. These estimates included the amount of time for a caseworker to investigate a match (30 minutes or 75 minutes), average hourly wage and benefit adjustment for caseworkers (\$26.65 including 40 percent benefits), information system processing cost (\$2,000 per quarter), and supervisory (\$10,810 annually) and technical labor costs (\$22,265 annually). These cost estimates were used for each of the study States and for all States included in the national-level estimates.

F. NATIONAL-LEVEL COMPUTATIONS

Computations of costs and benefits for the four States that provided data for this analysis facilitated the development of multipliers that were used to extend the analysis to include all States that submitted match files. It is assumed that the results for the four participating States are normally distributed and that average values represent reliable estimators. The national-level computations are based on the number of matches returned to States, which was taken directly from the PARIS website, and the data processing specifically addresses the fact that each apparent unreported mover is present in the returned files of at least two States.

III. Cost Benefit Analysis Results

This cost benefit analysis is based on match files that were processed in a consistent manner, and on limited reconciliation data provided by a few States that were used to compute multipliers to estimate costs and benefits. In the following sections, State-level cost benefit results for the States that provided PARIS match files for this analysis are presented by file and program for the August 2008 match, and then projected over the course of a year from the November 2007 match to the August 2008 match.

National-level cost benefit results are presented in terms of returns on investment (ROI) and in terms of actual net savings for each file and program, as well as overall. Sensitivity analysis is used to test the impact of assumptions about the time required to work a match, the percent of cases closed due to PARIS matches, and the number of States that actually conduct follow-up investigations of PARIS matches.

A. STATE-LEVEL RESULTS

Individual State-level results for the four States that provided raw match files for this analysis are reported below for the August 2008 quarterly match, and also projected over the year beginning with the November 2007 match through the August 2008 match. For the Interstate match file, the results are reported as the maximum potential amount of improper payments avoidance and net savings to each State by program. For the VA and Federal files, reasonable estimates of benefits and net savings related to income verification are provided for each State by program.

Closing cases (Interstate match file)

States that focus their efforts on closing cases based on the Interstate match have the potential to terminate benefits for SNAP, TANF, and Medicaid clients before they would otherwise have timed out of the system. The “early” termination of SNAP benefits that results from working PARIS matches on the Interstate file allows States to avoid the obligation of funds for SNAP clients that have moved, and are thus not using their benefits. However, because the true benefit to the State, in the case of SNAP, is the avoidance of improper payments, the full avoidance amount is the basis of our estimations. Early termination of TANF and Medicaid benefits translates into a true savings to the State as it avoids making direct payments to clients (TANF) or providers (Medicaid capitation plans) that would be cashed or permanently obligated.

The improper payment avoidance values for the SNAP program in the August 2008 match are presented in Table 3-1. These values are based on the assumption that all cases that are referred for follow up are closed, and thus, represent the maximum potential benefit to the States. Actual closure rates vary by State depending on a number of factors, including, but not limited to, the

resources available to work PARIS matches and the type of follow up activities that are conducted (closing cases due to unreported moves versus initiating fraud investigations). For example, summary-level data from two PARIS member States indicate that their closure rates are 22 percent and 41 percent, respectively. Because of the many factors that can impact closure rates, it was not appropriate to apply these closure rates to our results; therefore, we assumed a 100 percent closure rate. However, by filtering the data files as previously described to exclude invalid matches, closed cases, and clients that moved into the study State, and are thus, legitimately receiving benefits in the study State, it is realistic to expect that a majority of referred cases would be closed given ample resources.

Table 3-1 also provides estimates of the net savings to the State, which reduces the avoidance amount by the variable cost for each match in each program plus an equitable distribution of State and county program overhead costs among the programs.

Table 3-1. Quarterly estimates of improper payment avoidance and net savings related to closing all potential SNAP avoidance cases, according to the August 2008 match file.

State	SNAP			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	156	\$255,636	\$2,791	\$252,845
KS	25	\$28,978	\$1,045	\$27,933
ME	26	\$21,837	\$1,059	\$20,778
NM	48	\$83,282	\$1,353	\$81,929

Tables 3-2 and 3-3 provide values for TANF and Medicaid in an identical format by State. Again, Medicaid amounts are computed using State-specific capitation payment rates that are adjusted to eliminate fee-for-service beneficiaries.

Table 3-2. Quarterly estimates of improper payment avoidance and net savings related to closing all potential TANF avoidance cases, according to the August 2008 match file.

State	TANF			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	4	\$15,526	\$2,110	\$13,416
KS	1	\$1,713	\$363	\$1,350
ME	4	\$8,560	\$378	\$8,182
NM	2	\$809	\$670	\$139

Table 3-3. Quarterly estimates of improper payment avoidance and net savings related to closing all potential Medicaid avoidance cases, according to the August 2008 match file.

State	Medicaid			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	1431	\$2,902,068	\$11,604	\$2,890,464
KS	687	\$676,008	\$9,859	\$666,149
ME	125	\$415,022	\$9,873	\$405,149
NM	1041	\$2,148,624	\$10,166	\$2,138,458

Tables 3-4, 3-5, and 3-6 show annualized estimates of improper payment avoidance and net savings to the State with regard to the SNAP, TANF, and Medicaid programs, respectively. It is assumed that each State conducts follow-up activities on all potential avoidance cases, therefore, the number of potential avoidance cases in each quarter after the first quarter is reduced by the percentage of cases that were found to be redundant in subsequent quarters. See Table 2-4 for non-redundancy rates determined in this analysis.

Table 3-4. Annualized estimates of improper payment avoidance and net savings related to closing all potential SNAP avoidance cases.

State	SNAP			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	403	\$615,802	\$8,976	\$606,826
KS	163	\$249,425	\$5,782	\$243,643
ME	68	\$104,442	\$4,518	\$99,923
NM	161	\$246,417	\$5,756	\$240,661

Table 3-5. Annualized estimates of improper payment avoidance and net savings related to closing all potential TANF avoidance cases.

State	TANF			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	21	\$51,051	\$476	\$50,575
KS	9	\$20,600	\$308	\$20,292
ME	4	\$8,569	\$242	\$8,327
NM	8	\$20,494	\$307	\$20,187

Table 3-6. Annualized estimates of improper payment avoidance and net savings related to closing all potential Medicaid avoidance cases.

State	Medicaid			
	Number of potential avoidance cases	Improper Payment avoidance	Cost	Net savings
CO	4291	\$8,710,590	\$94,457	\$8,616,133
KS	1753	\$1,716,259	\$60,635	\$1,655,624
ME	728	\$1,216,156	\$46,973	\$1,169,182
NM	1701	\$3,509,099	\$59,942	\$3,449,157

Fraud investigations (Interstate match file)

States that focus their efforts on identifying and investigating clients that are fraudulently using their benefits (e.g., intentionally cashing TANF benefits in two or more States at the same time) will most likely attempt to recoup the amount of improper payments made to those clients.

Unfortunately, the data provided for this analysis were not sufficient for the development of estimates for potential fraud recoveries. However, Table 3-7 presents estimates of improper payment issuance that was identified through the August 2008 PARIS file. A portion of these estimates, equivalent to the rate of fraud in each program, may be eligible for recovery.

Annualized estimates of improper payment issuance are not provided, as we assume that the rate of improper payment issuance would be relatively small once a State begins using the Interstate match file to close cases and avoid the issuance of improper payments.

Table 3-7. Quarterly estimate of improper payment issuance as identified on the August 2008 PARIS match file, by program.

State	SNAP		TANF		Medicaid	
	Number of clients to whom improper payments were issued	Improper payment issuance amount	Number of clients to whom improper payments were issued	Improper payment issuance amount	Number of clients to whom improper payments were issued	Improper payment issuance amount
CO	294	\$352,790	4	\$19,753	1,404	\$1,894,873
KS	88	\$66,530	5	\$3,277	684	\$265,060
ME	49	\$38,435	7	\$8,639	243	\$310,846
NM	146	\$115,641	6	\$5,655	1,019	\$815,756

Verifying income (Federal and Veteran match files)

States that use the Federal and/or Veteran match files for the purpose of verifying income will potentially avoid making improper payments in the future. The States may use income data provided on the files to identify income from Federal sources or from the VA that was previously under- or unreported by program clients. As a result, these clients may no longer qualify for benefits and be terminated from the program, or, in the case of SNAP, may have their benefits reduced.

Table 3-8 shows estimated August 2008 results for the SNAP programs of the three participating States based on processing of the Veteran files. Included estimates are the number of cases referred for follow-up, number of cases that were closed or for which benefits were reduced, the improper payment avoidance amount, and the net savings. Computations are described in the Methods section. Table 3-9 shows similar August 2008 estimates applicable to the Medicaid programs. Table 3-10 shows annualized results for the SNAP programs that exclude redundant cases, and Table 3-11 shows similar data for the Medicaid program resulting from income verification using the Veteran file. The annualized estimates are based on the assumption that States began working the matches in November 2007 and continued through August 2008, thus they represent steady-rate, annualized savings in the first year.

Table 3-8. Quarterly estimates of improper payment avoidance and net savings related to reducing or closing benefits for SNAP clients who under/unreported VA income, according to the August 2008 match file.

SNAP				
State	Number of clients referred for follow up	22.8% closed/reduced		
		Number of cases for which benefits were closed/reduced	Improper Payment avoidance	Net savings
CO	1178	260	\$45,622	\$6,380
ME	1371	313	\$53,085	\$7,414
NM	780	178	\$30,189	\$4,205

Table 3-9. Quarterly estimates of improper payment avoidance and net savings related to closing capitation benefits for Medicaid clients who under/unreported VA income, according to the August 2008 match file.

MEDICAID				
State	Number of clients referred for follow up	2.4% closed		
		Number of cases for which benefits were closed	Improper Payment avoidance	Net savings
CO	1178	28	\$56,784	\$17,542
ME	1371	33	\$55,044	\$9,373
NM	780	19	\$39,216	\$13,232

Table 3-10. Annualized estimates of improper payment avoidance and net savings related to reducing or closing benefits for SNAP clients who under/unreported VA income, according to the August 2008 match file.

SNAP				
State	Number of clients referred for follow up	22.8% closed/reduced		
		Number of cases for which benefits were closed/reduced	Improper Payment avoidance	Net savings
CO	2,031	463	\$78,525	\$10,867
ME	2,420	552	\$93,619	\$13,003
NM	875	200	\$33,920	\$4,772

Table 3-11. Annualized estimates of improper payment avoidance and net savings related to closing capitation benefits for Medicaid clients who under/unreported VA income, according to the August 2008 match file.

MEDICAID					
State	Number of clients referred for follow up	2.4% closed			
		Number of cases for which benefits were closed	Improper Payment avoidance	Cost	Net savings
CO	2,031	49	\$99,372	\$67,658	\$31,714
ME	2,420	58	\$96,744	\$80,616	\$16,128
NM	875	21	\$43,344	\$29,148	\$14,196

Table 3-12 shows estimated August 2008 results for the SNAP programs of the three participating States based on processing of the Federal files. Included estimates are the number of cases referred for follow-up, number of cases that were closed or for which benefits were reduced, the improper payment avoidance amount, and the net savings. Computations are described in the Methods section. Table 3-13 shows similar August 2008 estimates applicable to the Medicaid programs. Table 3-14 shows annualized results for the SNAP programs that exclude redundant cases, and Table 3-15 shows similar data for the Medicaid program resulting from income verification using the Federal file. The annualized estimates are based on the assumption that States began working the matches in November 2007 and continued through August 2008, thus they represent steady-State, annualized savings in the first year.

Table 3-12. Quarterly estimates of improper payment avoidance and net savings related to reducing or closing benefits for SNAP clients who under/unreported income from a Federal employer, according to the August 2008 match file.

SNAP					
State	Number of clients referred for follow up	22.8% closed/reduced			
		Number of cases for which benefits were closed/reduced	Improper Payment avoidance	Cost	Net savings
CO	763	174	\$29,510	\$25,417	\$4,093
ME	581	132	\$22,387	\$19,355	\$3,032
NM	520	119	\$20,182	\$17,323	\$2,859

Table 3-13. Quarterly estimates of improper payment avoidance and net savings related to closing capitation benefits for Medicaid clients who under/unreported income from a Federal employer, according to the August 2008 match file.

MEDICAID					
State	Number of clients referred for follow up	2.4% closed			
		Number of cases for which benefits were closed	Improper Payment avoidance	Cost	Net savings
CO	763	18	\$36,504	\$25,417	\$11,087
ME	581	14	\$23,352	\$19,355	\$3,997
NM	520	12	\$24,768	\$17,323	\$7,445

Table 3-14. Annualized estimates of improper payment avoidance and net savings related to reducing or closing benefits for SNAP clients who under/unreported income from a Federal employer.

SNAP					
State	Number of clients referred for follow up	22.8% closed/reduced			
		Number of cases for which benefits were closed/reduced	Improper Payment avoidance	Cost	Net savings
CO	1,495	341	\$57,833	\$49,819	\$8,014
ME	1,130	258	\$43,757	\$37,633	\$6,124
NM	822	187	\$31,715	\$27,387	\$4,328

Table 3-15. Annualized estimates of improper payment avoidance and net savings related closing capitation benefits for Medicaid clients who under/unreported income from a Federal employer.

MEDICAID					
State	Number of clients referred for follow up	2.4% closed			
		Number of cases for which benefits were closed	Improper Payment avoidance	Cost	Net savings
CO	1,495	36	\$73,008	\$49,819	\$23,189
ME	1,130	27	\$45,036	\$37,633	\$7,403
NM	822	20	\$41,280	\$27,387	\$13,893

B. NATIONAL-LEVEL RESULTS

National level results for the Interstate match file are presented in terms of estimated costs and benefits as well as in terms of returns-on-investment by program and overall¹¹. The national-level analysis assumes that all States participating in PARIS fully implemented the program with their Interstate match files at the same time, and the analysis projects performance over the course of 1 year and attempts to correct for cases that match repeatedly over time. Table 3-16 provides national estimates of the costs and benefits of closing cases due to unreported moves (and avoiding improper payments) for the Interstate match file overall and by program.

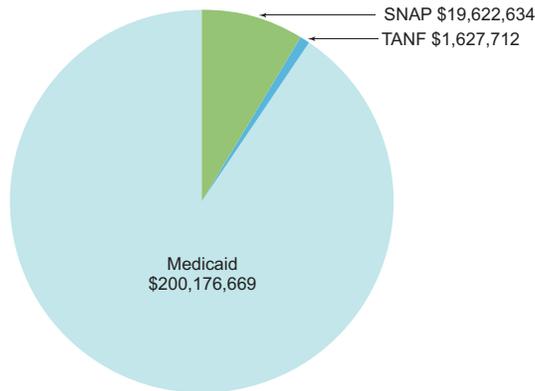
Table 3-16. Table of Costs and Benefits assuming 100 percent closure rate.

	Nov 07	Feb 08	May 08	Aug 08	Total
National Cost	\$945,320	\$791,088	\$758,847	\$1,224,921	\$3,720,177
Benefits					
National Benefit Total	\$63,530,495	\$38,243,935	\$38,871,272	\$80,781,314	\$221,427,015
SNAP	\$4,458,013	\$3,710,736	\$3,879,230	\$7,574,655	\$19,622,634
TANF	\$304,359	\$369,878	\$344,617	\$608,859	\$1,627,712
Medicaid	\$58,768,122	\$34,163,321	\$34,647,426	\$72,597,800	\$200,176,669

¹¹ These figures represent the potential cost and benefits to States that were active in the August 2008 PARIS match. They do not include figures from California, which had not yet submitted a PARIS match. We believe these numbers will be significantly larger once California submits data.

By subtracting the national cost from the national benefit amounts in Table 3-16, a total net benefit figure can be determined. Figure 5 presents a graphic representation of the total net benefits of PARIS by each of the three participating programs.

Figure 5: National Benefits assuming 100 percent closure rate.



The ROI values provided in Table 3-17 are based on the same assumptions with one exception. Because the actual savings realized by closing unreported SNAP movers is limited to the cost of capital (0.74 percent per month, or 3.0 percent APR) as previously described in the Methods section, we have used the cost of capital as the basis of ROI calculations for the SNAP program. Again, these values are based on 100 percent closure rate, and thus, represent the maximum potential ROI for the Interstate match file.

Table 3-17. Table of ROI with 100 percent closure rate

	Nov 07	Feb 08	May 08	Aug 08	Total
National, total	6159%	4276%	4523%	5890%	5336%
SNAP	51%	14%	15%	49%	34%
TANF	10659%	8040%	8106%	10521%	9306%
Medicaid	6602%	4682%	4997%	6462%	5827%

Because many States are still in the process of developing and implementing filters; submitting data on only one or two of the primary programs (SNAP, TANF, and Medicaid); and conducting limited follow up, the values presented in Tables 3-16 and 3-17 reflect costs and benefits and ROIs that would be realized in ideal circumstances – all States submitting SNAP, TANF, and Medicaid program data on a quarterly basis; conducting follow up on all three programs; and closing all cases referred for follow up. However, we know that not all States are conducting

follow up activities. For this reason, we present a series of ROI values based on more restrictive assumptions. Not only do these values provide more realistic estimates based on the current status of State participation in PARIS, but they show that even in these less-than-deal scenarios, PARIS provides a significant ROI.

The first less-than-ideal scenario assumes all States conduct follow-up activities for each quarter and each Interstate match case takes 30 minutes to resolve. However, the closure rate is set at 70 percent instead of 100 percent. The ROI results for this scenario are displayed in Table 3-18.

Table 3-18. National return on investment and return on investment by file type and by program type.

	Nov 07	Feb 08	May 08	Aug 08	Total
National, total	4282%	2963%	3136%	4093%	3705%
SNAP	6%	-20%	-19%	4%	-6%
TANF	7432%	5598%	5644%	7335%	6484%
Medicaid	4591%	3248%	3468%	4493%	4049%

In this scenario, SNAP also only provides a slightly positive return-on-investment in the first quarter and negative ROI in the subsequent quarters. The SNAP programs negative ROI is primarily related to using the cost of capital (0.74 percent per month, or 3.0 percent APR) for the avoidance amount instead of using the full avoidance amount as was used in the State-level results. For SNAP, the avoidance amount is not lost to the State, which dispenses SNAP funds to EBT accounts, because the State can periodically recoup unused benefits. The actual dollar cost is the cost of capital; that is, the cost of having the money tied up in an unused EBT account. While the dollar cost is low, the potential for fraud exists and program integrity may be harmed by States continuing to carry these cases.

The ROI results provided in Table 3-19 are based on the same assumptions as Table 3-18, except that a very conservative estimate of 20 percent of avoidance cases closed is used and that it takes 75 minutes to work each match. This scenario is significantly more constrained, and it still returns a positive ROI overall and for each program, except SNAP, for the reasons given previously.

Table 3-19. National return on investment overall and by program type assuming 20 percent closure rate and that each match takes 75 minutes.

	Nov 07	Feb 08	May 08	Aug 08	Total
National, total	563%	423%	451%	538%	505%
Interstate File	563%	423%	451%	538%	505%
SNAP	-84%	-86%	-86%	-84%	-85%
TANF	1039%	873%	878%	1031%	959%
Medicaid	610%	472%	507%	599%	560%

Table 3-20 shows ROI results for the same conditions in Table 3-19 (20 percent closure rate and 75 minutes to work a match) with one additional constraint. States that do not conduct follow-up activities do not accrue benefits, but continue to incur costs associated with file preparation and submission. For this reason, the ROI results based on this scenario (only 35 States working the Interstate match file) are presented in Table 3-20.

Table 3-20. National return on investment overall and by program type assuming 20 percent closure rate, 75 minutes to work each match, and only 35 states conduct follow-up activities.

	Nov 07	Feb 08	May 08	Aug 08	Total
National, total	510%	392%	405%	495%	460%
SNAP	-85%	-87%	-87%	-85%	-86%
TANF	1003%	847%	836%	997%	923%
Medicaid	553%	438%	456%	551%	511%

National-level estimates for the Veteran file and the Federal file are excluded because the factors used to compute estimates are based on few observations and are not considered reliable; however, it should be noted that high redundancy rates in both files in subsequent quarters contribute to negative returns-on-investment in each of the subsequent quarters, but not in the first quarter.

IV. Discussion

A. LIMITATIONS OF A PROSPECTIVE ANALYSIS

In examining options for conducting a cost-benefit analysis of PARIS, Altarum explored the potential to conduct both a retrospective analysis in States that have been participating in PARIS for several years, and a prospective analysis for States who either were new to PARIS or had not conducted any follow-up on their matches. However, once we began approaching States with more PARIS experienced States to participate in this study, we discovered a number of challenges around the scope of PARIS activities, the extent to which follow-up was conducted, the availability of documented results, and the level of interest a State had in cooperating with our efforts. It became clear that a retrospective analysis would be of little value, since the diversity of State approaches meant that any results for an individual State would not be comparable with another State.

Using data obtained from the national PARIS evaluation, the Altarum project team identified a group of States that we believed had the potential to provide us with data for conducting a retrospective analysis. However, we soon discovered that the problems noted above precluded our developing a valid methodology with which to conduct such a study. There were a number of issues that came up, both single issues and combinations of issues, that impeded our ability to move forward with a retrospective analysis. These issues included:

- ▶ *Diversity in Scope.* Several of the States we examined for inclusion has self-imposed limits on which programs were included in the PARIS matches, which matches were submitted, and how often they submitted.
- ▶ *The lack of reconciled data.* Many States simply do not document the results of PARIS follow-up activity, thus we were unable to determine how successful a State was in taking a positive action to resolving the matches.
- ▶ *Lack of follow-up on PARIS matches.* Some States either did not conduct follow-up or had very limited follow-up activities. For example, some conducted follow-up on the Interstate match, but not the Veterans or Federal matches. Others had some local jurisdictions conducting follow-up, while other jurisdictions did not.
- ▶ *Lack of interest in participating in the study.* Some States informed us that they did not have the time or resources to participate in a retrospective study.

As a result, we decided to take the approach that a prospective study would be of greater benefit to ACF in understanding the full potential of PARIS. By their very nature, PARIS data matches indicate the potential for a problem that needs resolution. What States must do to maximize the

full potential of PARIS is to sort out what each of the matches mean and then have a system in place to resolve the matches. We believed that building a model that properly analyzes PARIS data in a way that identifies those matches that most likely are in need of resolution would provide the data necessary to estimate how much savings could be realized if follow-up activities were conducted to properly resolve each match. Using an analysis plan that combined strong data filters with solid tested assumptions on how matches should be resolved would provide ACF with financial information reflecting the full potential of PARIS as well as provide States with an incentive to actively pursue follow-up.

This approach does have some limitations. The key limitation is that the national estimates of PARIS savings only reflect a potential savings, and are not adjusted to the reality of the self-limiting factors adopted by States. Another limitation is that the assumptions used tend to be based upon the documentation provided from a small number of States. While we believe they are solid assumptions, they are not well tested across a large number of States. Finally, cost estimates used for the analysis reflect what we believe to be the reasonable cost of conducting PARIS activities. However, States may decide to put more or fewer resources into PARIS, and since there is no real national model on how PARIS is conducted, the costs used for this report may not necessarily reflect the current activities.

One final limitation of this approach is that the estimates made for the prospective savings may well be too low because we did not include an amount for potential recoveries. One issue that could not be addressed through the analysis of State-level PARIS data was the extent to which funds that were issued to clients or paid on their benefit (Medicaid) could be recovered by States, either because fraud was committed or simply as an overpayment recovery. States have different rules about which cases are identified for a recovery, and discussions with the States we included in the study indicated mixed policies. Two of the States indicated that they had the authority to recover capitation payments in Medicaid as an overpayment, while two others indicated that their own internal policies placed limitations on recoveries once a payment was made.

With regard to TANF and SNAP, States again expressed a mixture of policies. Overpayments are made when a client moves and does not report the move, or fails to report all income. States need to first determine if the client was eligible for the benefit level they were receiving (in the case of unreported income) or if they used the benefit that was issued (in the case of unreported movers). States then need to determine if it is even possible to recover overpayments, and then if the amount of overpayment is worth the cost. Should States be successful in recovering funds that are considered overpayments, then the national estimates of the potential benefit amount would need to be increased.

B. CONCLUSIONS

Described below are the two key findings from the PARIS cost-benefit analysis.

The potential savings from PARIS are significant. The State-level net savings presented in the Results section clearly indicate that there is a significant potential for States to benefit substantially by fully participating in PARIS. If States submit data for all three of the major programs (TANF, SNAP, and Medicaid), participate in all three matches (Interstate, Veterans, and Federal), and make solid efforts to follow-up on matches that are highly likely to produce results, they should experience significant benefits in the avoidance of improper payments. Each of the three different programs can realize some savings.

SNAP has a potential for large improper payment avoidance. However, some factors may affect the ability of programs to realize savings. One of the major factors identified as a potential barrier is how States with simplified reporting handle PARIS matches. Some States view a PARIS match as irrelevant to a client's case because simplified reported rules do not require any follow-up until the next certification period, therefore no action is necessary. Other States see the unreported movers as being an exception to simplified reporting, and require that a caseworker take action to close these cases.

Another factor is the level of SNAP benefit and whether or not it is worth the time of a caseworker to close the case. Some SNAP recipients may only receive a small amount of assistance (such as \$10 a month) and the State does not see that it is to their benefit to take action prior to the natural end of the certification period.

Clearly, the largest savings can be realized by closing Medicaid cases due to unreported moves, particularly when the beneficiaries are enrolled in capitation plans. Medicaid clients tend to be on the program longer than those participating in the other two programs and capitation plans make monthly payments directly to the client's provider. The issuance of these benefits most likely continues until the client's certification period ends, which could be 12 months or longer. By identifying the unreported movers and terminating their benefits, the State will avoid making months, or perhaps years, of payments for benefits that will not be used because the client is living in another State.

At a national-level, the PARIS project will produce a positive return on investment, and this conclusion appears robust under varying conditions designed to test the sensitivity of these results and to more accurately reflect the current scope of PARIS activities.

States can be encouraged to do more follow-up. As has been mentioned frequently in this report, States must conduct follow-up activities to obtain the benefits of participating in PARIS. The four States for whom we conducted a cost-benefit analysis received separate reports on their results, and were provided briefings by Altarum staff. Officials in these States had a very positive reaction to the results presented, and felt that they could do more to convince decision-

makers to devote resources to PARIS follow-up activities. The four States for which independent results were provided either had not conducted any follow-up activities or limited the scope of their follow-up. These States felt like they needed a prospective analysis of their data to show key decision-makers the value of dedicating resources to this effort.

During the briefings with each State, staff working on PARIS became very enthused about the results and were sure that the demonstration of potential savings provided in their report would move decision-makers to action. Two of the States indicated that they plan to provide similar briefings to key department managers in order to develop decision packages to fund or expand PARIS follow-up.

C. RECOMMENDATIONS

Based on the results of the cost-benefit analysis, the following recommendations should be considered by States participating in PARIS and by ACF.

1. States should be encouraged to take full advantage of all that PARIS has to offer.¹²

As we have noted many times, the diversity in how States approach PARIS often creates self-limitations with regard to realizing the full potential for savings. States need to be encouraged to develop systems for analyzing PARIS data in a way that helps to prioritize matches for which follow-up activities should be conducted, and then have in place a follow-up system that can provide meaningful results in an efficient and effective manner. Some specific recommendations in this area include:

- ▶ *Carefully and thoughtfully filter match data in order to maximize the State's benefit to cost ratio.* Having a strong filtering system up front will help States minimize conducting follow-up activities on cases that should not have been worked. Filtering out cases where demographic characteristics do not match eliminates those resulting from incorrect social security number entry. Filtering out matches that appeared in prior quarters will eliminate cases where States have verified residency of the client but the matching state has not closed the case (Interstate file), verified income (Federal and Veteran files), and/or verified eligibility for health insurance through the VA or a Federal employer (Federal and VA files). By having strong filters, States will need to expend less effort working matches, which will increase their "net savings."
- ▶ *Provide those conducting follow-up with useful reports.* Creating reports that have only the data needed to understand the problem or issue can be very useful in helping State officials

¹² States that are interested in developing better systems will have access to the analytic tools developed for this project. These tools will be presented and discussed at the March 2009 PARIS Conference.

conduct follow-up and resolve cases. Many States simply forward the entire PARIS match file to their local offices for resolution. Not all the data contained in the PARIS file is useful in regard to resolving the match, and local offices may either decide that it takes too much effort to work a PARIS file or they become overwhelmed by the size of the report and waste time trying to figure out the meaning of all the data. Creating simple reports that clearly show what type of action is necessary will make it easier and more efficient to close cases.

- ▶ *Prioritize follow-up if limited workforce resources are of concern.* As previously described, closing cases that involve Medicaid recipients will result in the most significant savings to States. For this reason, should a State be faced with limited resources, PARIS activities should focus on identifying Medicaid clients that have moved out of State and terminating their benefits in a very timely manner. If the States Medicaid program is currently not involved in resolving PARIS matches, it should be. If it is involved, there should be a strong focus on resolving these cases.

2. Document follow-up to encourage accountability and to create better estimates of costs and savings.

One observation that was made during site visits conducted for the PARIS evaluation was that few States document PARIS follow-up activities. Documenting follow-up can be helpful in two ways. First, it allows the State and/or county-level administrators to hold local field staff accountable for conducting follow-up. In some States local field staff are handed a list or file of cases to follow up on and they are never queried about their progress or the results of their efforts. In fact, in these States administrators couldn't say for certain whether or not the cases were even being worked.

Second, by documenting the outcome of PARIS follow-up activities as well as the resources required to conduct follow-up (e.g. time, salaries, etc.) States can produce more accurate estimates of costs and savings related to working the PARIS match files that would be useful for justifying PARIS activities or for including in various legislative reports and/or management reviews.

3. Focus national PARIS efforts on encouraging and helping States to fully participate in PARIS and conduct follow-up activities.

The PARIS project clearly has the potential to provide Federal and State program managers with significant savings and return on investment. Much of the Federal activity over the past several years has been focused on encouraging States to join PARIS, examining and promoting the expansion of PARIS into new programs (childcare and workers compensation), and providing a limited amount of training and mentoring to new States to help them set PARIS up. In regard to the latter, ACF should be commended for funding projects to help States become PARIS members and providing them with mentor States to help them get started. Additionally, ACF sponsors an annual conference to promote State sharing of ideas. Finally, ACF provided

technical assistance to a limited number of States to help them get started in conducting follow-up activities or improve upon their current PARIS systems.

However, it is clear from how States limit their use of the PARIS files that there is a continuing need for ACF to encourage and help States reach their full potential. Ongoing efforts by ACF are needed to help and promote full use of PARIS as an effective tool in preventing and managing improper payments, and promoting best practices where they exist. ACF can play a critical role in facilitating communication between States, encouraging mentoring across states, and identifying State best practices. Promoting best practices on the PARIS website and through annual meetings helps States to understand the great potential of PARIS. Ongoing efforts will be needed as States that are making minimal efforts to take advantage of PARIS and maximize its full potential and begin to explore options as to how to effectively manage the ongoing implementation of their PARIS projects.

APPENDIX

Appendix A

Detailed methods used to process the Interstate data file.

Briefly, the methods for the analysis of the Interstate match file primarily use raw PARIS match files that are provided by four States that agreed to participate. These files are essentially as they are received from the Defense Manpower Data Center (DMDC). This allows the application of a consistent process to identify public assistance recipients who have moved from one State to another and remain an open case in both States. Additionally, analyzing PARIS match files over the course of an entire year facilitated an estimate of the initial group of cases that should be terminated because the recipient no longer resides in the State or cases that are fraudulent; and provided an estimate of steady State activity.

A. Data processing of August 2008 match file

Because reconciliation of PARIS initiated alerts on the Interstate match file is not well documented, we conducted our cost-benefit analysis using raw State data files from August 2008 and by developing a set of assumptions. First, we eliminated erroneous matches. Matches were deemed erroneous and removed from the analysis if they mismatched on first name, last name, and date of birth. In other words, if the records matched on any one of these three fields then they remained in the analysis. Table A-1 shows the percent of all matches that were removed from the analysis because they were determined to be erroneous.

Table A-1. Number and percent of matches that were deemed erroneous, by State

State	# of Interstate matches	Erroneous matches		TOTAL number of VALID matches	
	N	n	(%)	n	(%)
CO	6057	271	4.5%	5786	95.5%
KS	2926	109	3.7%	2817	96.3%
ME	1633	109	6.7%	1524	93.3%
NM	3211	217	6.8%	2994	93.2%

Second, we needed to determine who the most likely “movers” were. Movers needed to be identified by public assistance program, meaning that a client could be deemed a “mover” for the SNAP program, the TANF program, the Medicaid program, or any combination of the above, so

that we could estimate program-specific costs and benefits estimates. Table A-2 shows the numbers of movers by program and by the States that provided data to support this analysis.

In order to be included as a “mover” in our cost-benefit analysis a client had to meet the following criteria:

- ▶ *Have program start dates that indicate the client moved out of State.* If a client’s program start date in the matching State was later than the program start date in the State of interest, we assumed that they moved out of State.
- ▶ *Have open program benefits in both States.* The PARIS file is used to identify clients that are *actively* receiving benefits in more than one State; therefore, we excluded any “movers” whose benefits had already been terminated. A majority of States fill the program end date fields with actual termination dates (date benefits were closed). However, there are a few States that fill program end date fields with future end dates, or dates that are indicative of the end of the clients’ recertification period. For this reason we exclude any “movers” that have program end dates in either State (indicating the case is no longer active), unless the end dates are in the future (indicating the case is still active, but benefits will expire on a given date).

Table A-2. Number of movers, by State and program

State	# of VALID matches	Total movers		SNAP movers		TANF movers		Medicaid movers	
	N	n	(%)	n	(%)	n	(%)	n	(%)
CO	5786	1838	31.8%	564	30.7%	6	0.3%	1431	77.9%
KS	2817	767	27.2%	125	16.3%	8	1.0%	687	89.6%
ME	1524	282	18.5%	49	17.4%	7	2.5%	251	89.0%
NM	2994	1132	37.8%	147	13.0%	6	0.5%	1041	92.0%

Third, we needed to determine when a client’s SNAP and TANF benefits would terminate naturally (if they hadn’t been identified via PARIS) as this information was used to calculate the avoidance period for savings estimations. For clients in States that report future end dates, we simply used this date as the natural termination date. However, for the majority of clients, we needed to create an estimated termination date. To do this we:

- ▶ *Calculated certification period length by program.* In this case, we used the average number of days clients spent on each program, or the difference between start and end dates, as a surrogate for certification period length. Only clients whose cases had been closed for a

given program would have contributed to this average. Moreover, this average was calculated across all States and used as a constant in our analysis, see Table A-3.

Table A-3. Average program lengths, by State and program.

State	SNAP movers		TANF movers		Medicaid movers	
	n	months	n	months	n	months
CO	798	8.7	192	4.7	1095	18.4
KS	29	4.6	9	3.3	61	13.4
ME	45	10.4	26	3.8	141	12.7
NM	880	9.6	364	7.1	66	12
AVERAGE	1752	9.1	591	6.1	1363	17.3

- *Estimated the natural termination date for each client by program (SNAP and TANF only).* “Natural” termination date is the date benefits would most likely be terminated if they were not identified due to PARIS. In this case, we used an estimation of the start date for the first recertification period since enrolling for benefits in the other State as a surrogate for natural termination date.

Specifically, we used the estimated length of a program’s certification period to determine the number of certification periods for which each client had been enrolled in program benefits within the State of interest. The number of certification periods was calculated by dividing the difference between the client’s start date in the State of interest and the start date in the other State by the certification period length. We then truncated this number of certification periods to the nearest whole number, added one more certification period, and extrapolated this value from the client’s start date in the State of interest to determine the next likely recertification period (first since enrolling for benefits in other State).

Fourth, benefit amounts for SNAP and TANF were consistently provided for every program client, but only in some States. In cases where no benefit amount was provided, the average benefit amount (across all States) was used instead (see Table A-4). Benefit amounts for Medicaid, on the other hand, were not provided on the Interstate match file. This is most likely because State Medicaid programs tend to be a mixture of capitation and fee-for-service (FFS) programs so determining the amount of benefits is not as straightforward as it is for SNAP and TANF. For the purposes of this cost-benefit analysis, we used data from a reliable, published

source to identify the 2001 capitation rates¹³ for each State and inflated them using the urban-medical consumer price index (CPI)¹⁴ in order to estimate current rates (2008). We ignored the dollar value associated with FFS programs on the assumption that if a client moved from the State and received medical care out-of-State, the submission of a claim would initiate an inquiry into the validity of the claim and the qualification of the benefit recipient.

Table A-4. Average benefit amount, by State and program.

State	SNAP		TANF		Medicaid*	
	n	avg. monthly \$	N	avg. monthly \$	n	avg. monthly \$
CO	3783	\$322	1312	\$441	N/A	\$169
KS	0	N/A	0	N/A	N/A	\$82
ME	402	\$188	99	\$425	N/A	\$139
NM	2224	\$339	118	\$460	N/A	\$172
AVERAGE	6409	\$319	532	\$447	N/A	\$156

* Medicaid figures represent adjusted capitation rates (2001 rates inflated to 2008 and reduced by the percentage of Medicaid clients that are enrolled in capitation plans.

Fifth, because we did not have access to reconciled data from the Interstate file, we needed to estimate the date benefits were or would have been terminated due to working the PARIS match. For this measure, we consistently used the 10th day of the second month post-submission. For example, for the August 2008 file submission, we used an estimated termination date of October 10, 2008. We chose this methodology because the PARIS match files are typically returned to the States around the 10th day of the month following submission. Theoretically, field staff or workers could start working the matches within days of the receiving the file. However, in order to make our estimates slightly more conservative, we assumed workers would take approximately 30 days to work each match.

13 Health Affairs, Exhibit 1, "Medicaid Managed Care Payment Methods and Capitation Rates," January/February 2003. Accessed November 11, 2008 on Kaiser Family Foundation website: <http://www.statehealthfacts.org/comparemaptable.jsp?ind=221&cat=4>. At the time of the survey, only 39 states including the District of Columbia offered Medicaid managed care. Of those, 36 responded to the survey. Nebraska, Oregon, and Tennessee declined to respond.

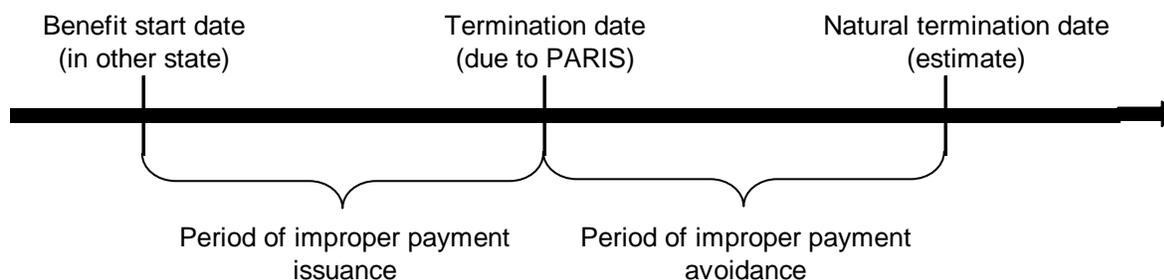
14 Consumer Price Index figures, which are based on information from the Bureau of Labor Statistics, were identified through the following website: http://www.buckconsultants.com/buckconsultants/Portals/0/documents/publications/newsletters/key_indicators/cpi.html

B. State-level benefit computations from the August 2008 match

Closing cases (improper payment avoidance)

Using the measures described in the data processing section, we calculated the avoidance period for each client. The avoidance period for SNAP and TANF is the difference between the natural termination date and the termination date that resulted from working the PARIS match (see Figure A-1).

Figure A-1



In some cases the avoidance period was a negative value. These are cases in which the client's benefits would have terminated naturally by the time the PARIS file was received by the State, and thus, were not included in our savings estimates. For this reason, many States run their PARIS match files against their current enrollment data and filter out cases that have closed since file submission. Table A-5 provides the estimates for the percent of cases in which benefits would have terminated naturally and the percent of cases that resulted in cost avoidance, as well as the average length of the avoidance period for those cases.

Table A-5. Number and percent of movers whose benefits would terminate naturally and whose benefits would still be active at the time of follow up and the average avoidance period length, by State and program.

State	SNAP						TANF					
	Number of movers*	Benefits terminated naturally		Avoidance cases		Avg. length	Number of movers*	Benefits terminated naturally		Avoidance cases		Avg. length
		n	(%)	n	(%)			n	(%)	n	(%)	
CO	298	142	47.7%	156	52.3%	5.7	6	2	33.3%	4	66.7%	4.7
KS	90	65	72.2%	25	27.8%	3.6	8	7	87.5%	1	12.5%	3.3
ME	49	23	46.9%	26	53.1%	3.4	7	3	42.9%	4	57.1%	3.8
NM	147	99	67.3%	48	32.7%	5.2	6	4	67.7%	2	33.3%	7.1
AVERAGE	584	329	56.3%	255	43.7%	5.2	27	16	59.3%	11	40.7%	6.1

* SNAP and TANF movers are at the case level

The avoidance period for Medicaid was calculated using a slightly different methodology. If the client had a Medicaid end date that was greater than the estimated termination date (due to PARIS) then the avoidance period was the lesser of the difference between these two dates, or 12 months. We treated Medicaid differently because of the length of time that clients tend to spend on Medicaid versus the length of time they are enrolled in the SNAP and/or TANF programs. We found that Medicaid clients are enrolled for an average of 17.3 months. Table A-3 shows the variation in length of Medicaid enrollment by State.

The avoidance amount for each client was calculated by multiplying their avoidance period by their benefit amount. A State-level estimate of avoidance was calculated by summing all client-level avoidance amounts by program, and these State level estimates are summed to provide a national level estimate. The national estimate is an annual estimate based on the numbers of returned matches in November 2007, February 2008, May 2008, and August 2008, and it is assumed that the November 2007 match was the initial match worked and followed-up by each participating State and, therefore, the avoidance amount for each subsequent quarterly match is reduced by the percentage of redundant matches described above.

The amount to be avoided in SNAP represents the amount of State funds allocated for the period between the date that the case worker terminated the benefit because of the PARIS match and the estimated end of the current eligibility period. Unused SNAP benefits are periodically voided by States and the funds subsequently reallocated; therefore, the actual savings to the States accrues at cost of capital over a 3- to 4- month period. Another benefit to the State in the case of SNAP is the “social benefits” or the avoidance of issuing improper payments and the ability to allocate those benefits to eligible individuals that may be on a waiting list for benefits. For this reason, the entire improper payment avoidance amount is used as the basis of State-level benefit computations.

The computations for TANF are similar to those for SNAP; however, TANF benefits are direct payments to the client and, therefore, represent an obligation of funds. For TANF, we assume that the benefits were cashed and therefore the full avoidance represents true savings to the State.

Medicaid is a longer term program than either SNAP or TANF, and as such the computations related to Medicaid benefits differ. As previously described, State Medicaid programs tend to be a mixture of capitation and FFS programs. FFS clients who move from the State only incur an allocation of funds for the State with little likelihood that the funds will be obligated, similar to SNAP, although the period of time until the State voids the obligation may be significantly longer. However, we do not include benefits related to closing cases for FFS Medicaid clients because we assume that if the client moves out of State and attempts to use their Medicaid benefits there, the State of interest would become aware of the situation once a claim was submitted for services.

Clients on a capitation program who have moved out of State, on the other hand, do incur an obligation of funds in the form of monthly payments to a managed care organization. States realize the full savings when terminating clients on capitation programs when they move out of State and are no longer eligible for Medicaid benefits in the State from which they moved. For this reason, the focus of our cost-benefit analysis with relation to Medicaid will be on clients enrolled in Managed Care or capitation plans; and State specific capitation rates, adjusted for the percentage of Medicaid recipients on capitation programs, are used to compute estimated savings.

C. Calculating rate of steady-State matches for annualized estimates

Several States have indicated that their follow-up on Interstate matches has been insufficient because of manpower issues. This potentially affects cost and benefit estimates that would be based only on the number of matches or on the number of public assistance recipients who appear (via data processing) to have moved. Interstate match files for November 2007, February 2008, May 2008, and August 2008 were provided by Maine, and Interstate match files for February 2008, May 2008, and August 2008 were provided by Kansas and New Mexico. These match files were processed as described above to identify likely “movers” in Medicaid, TANF and SNAP. The resulting files of movers were then sequentially compared to subsequent quarterly match files to determine the matches that were redundant from period to period. Given that most participating States have not fully developed and implemented follow-up procedures, it is important to estimate the costs and benefits associated with complete processing in the initial program quarter and costs and benefits associated with subsequent quarters assuming that all matches of likely movers were followed-up in the initial quarter. Example results are shown below in Figures A-2 and A-3 using Medicaid match data from one State. Graphical representations for SNAP data show similar trends, although the preponderance of SNAP recipients “age out” of the system within a quarter. Very few TANF cases were redundant.

Figure A-2 shows the number of Medicaid recipients who are likely to have moved, and the number of Medicaid matches of “movers” that appeared in the August 2007 match data that are redundant and would continue to show up in subsequent match files if cases were not closed. This latter (dotted) line represents the rate at which Medicaid recipients “age out” of the Medicaid system.

Figure A-2. Quarterly matches indicating a Medicaid (MC) “mover” compared to the number of redundant matches since August 2007.

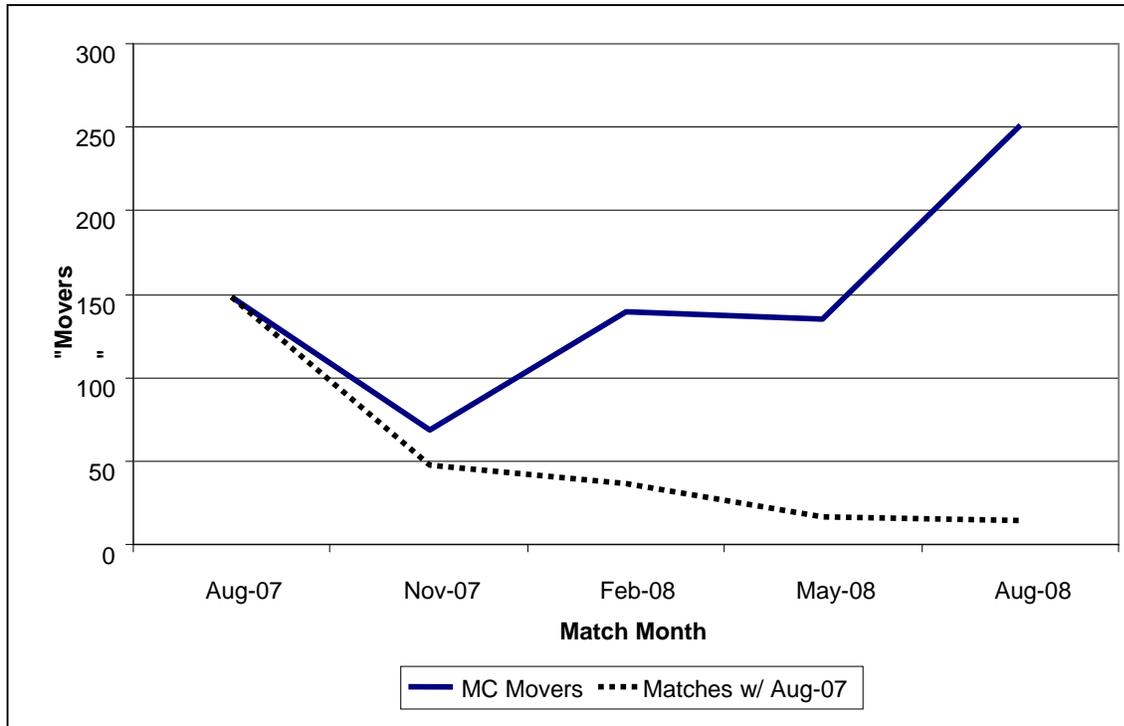
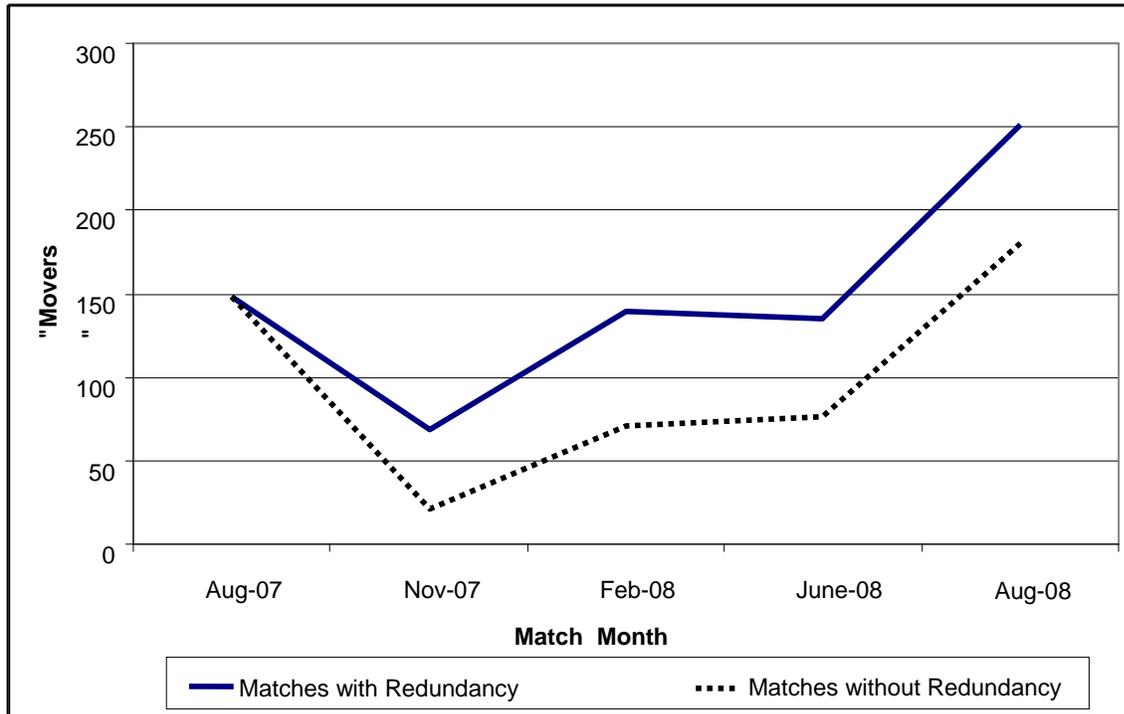


Figure A-3 shows the number of Medicaid recipients who were identified as being likely to have moved (including redundant matches from prior quarters that should have been removed), and the number of actual matches with the redundancy removed. The solid line represents those matches that would be identified as movers, but include matches from prior periods that should have been removed. The dotted line represents the number of matches that are “new” in the quarter being matched, and have the redundancy removed. The difference between the two lines is the number of likely “movers” who remain in the system and continue to match in another State because their cases were never closed. This difference also represents unnecessary workload for caseworkers unless they filter these out as redundant matches. For Medicaid, the average workload reduction is approximately 43 percent, and for SNAP, the average reduction is approximately 20 percent. This lower reduction of workload for SNAP is related to the shorter average time receiving benefits when compared to Medicaid (see Table A-3).

Figure A-3. Comparison of the number of matches identified as likely Medicaid “movers” with prior months redundant matches included and the number that would have been identified after redundant matches were removed.



In order to adjust the estimates of benefits from working Interstate file matches, the percent of matches that are not redundant has been computed by identifying and disregarding records in the subsequent quarter that were present in the previous quarter matches files. Table A-6 shows the percentage of valid new match cases for each of the subsequent quarters. Incidents of redundant TANF matches were rare, and a percentage was not computed. These percentages are applied to estimate steady-State benefits when it is known that a State has not worked the matches.

Table A-6. Percentage of valid new matches in subsequent quarters by program

Program	February 2008	May 2008	August 2008
SNAP	68.5%	76.9%	84.9%
TANF	100%	100%	100%
Medicaid	50.7%	52.2%	62.3%

D. State-level cost computations

A true representation of the total cost of PARIS would include costs derived from three areas: the cost of PARIS start-up; the ongoing cost of creating the master file, submitting the file to DMDC, and preparing and filtering the file once it is returned; and the cost of staff time devoted to follow-up activities, such as conducting coordination of benefits or trying to capture overpayment recoveries. Because the States included in our analysis, like a majority of PARIS member States, had realized the costs related to PARIS start-up several years ago, this cost line item was not included in our estimates. Our models focus on the steady State or ongoing costs of managing and working the PARIS matches. These two costs are described in detail below.

Ongoing State-level PARIS Costs

All of the States included in our analysis as well as all of the States interviewed for the PARIS Evaluation reported that the ongoing cost of creating PARIS files, submitting the data to DMDC, and preparing and filtering the results is relatively small. One State, which conducts an extensive coordination of benefits effort with the VA and TRICARE reported more significant costs for these activities. However, for most States, ongoing costs of PARIS operations are not commonly tracked, as most States incorporate PARIS activities into a more general, higher-level compliance activity. None of the States included in our analysis had a tracking system that would allow one to track costs specifically to PARIS activities. However, some States were able to provide estimates of the amount of time needed to create the files, submit the match, and filter and distribute the results. These estimates were averaged to approximate the annual costs per State, which are: systems processing cost of \$8,000 annually (if submitting for all four quarters), annual program specialist cost of \$22,265, and administrative and supervisory cost of \$10,810 annually.

Cost of Follow-up

Two of the States included in our analysis track follow-up costs. However, the data from one of these States was deemed to be somewhat unreliable and incomplete, most likely due to a lack of rigorous training for local field staff who are supposed to enter this information. Findings from the prior PARIS Evaluation indicate that costs vary by type of match. In general, it took local staff longer to work an average Federal or VA match than it did for them to work an Interstate match, thus creating a variance in the average cost per case worked among the three matches. Based on data provided for the prior evaluation by participating States, the hourly cost to work a match is \$26.65, and the time to accomplish the task is 30 minutes for an Interstate match and 75 minutes for a VA or Federal match.