INTRODUCTION . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Pg 1

... if applied statewide, LTC-ADI has the potential to lead to considerable savings through cost avoidance for the state of Illinois.

BENEFIT/COST ANALYSIS. . . . . . . . . . . . . . . . . . . . . . . .Pg 3
Findings, saving, costs

ERROR-PRONE PROFILING. . . . . . . . . . . . . . . . . . . . . Pg 7
The model could help OIG use its investigative resources more effectively by screening out those applications that are unlikely to be erroneous.

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DHS and IDPA should commit to formulating a plan to improve the LTC eligibility determination process.

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With the increased LTC population expected in the 21st century, improvement of the eligibility process could yield significant savings to Illinois taxpayers.
Office of the Inspector General

The mission of the Office of the Inspector General (OIG) as mandated by Public Act 88-554 in order to prevent, detect and eliminate fraud, waste, abuse, mismanagement, and misconduct, the Inspector General shall oversee the Illinois Department’s integrity functions . . .

Bureau of Quality Control

The mission of the Bureau of Quality Control (BQC) within the Office of the Inspector General (OIG) is to promote and enhance Program Integrity in the planning and administration of state human service programs through the development, collection, analysis, and evaluation of program data, outcomes and performance information for use in informed decision making.

This report was prepared by Phronsie Spaulding of the Bureau of Quality Control under the direction of Tim Byrnes, Quality Control Chief and Robb Miller, Inspector General. The error-prone profiling was conducted by Andrew Asher of the Bureau of Fraud Research. The assistance of all members of the Bureau of Quality Control, especially Jody Westerberg, Terry Mercer, and Rosalind Justus, is greatly appreciated.
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EXECUTIVE SUMMARY

In 1996, the Illinois Department of Public Aid (IDPA) began a Long Term Care-Asset Discovery Initiative (LTC-ADI). This pilot project has already saved the state $2.78 million.

Phase I was initiated in spring 1996 and was designed to identify applicants for Long Term Care (LTC) assistance who failed to disclose assets or who had unallowable asset transfers. The IDHS (Illinois Department of Human Services) offices in DuPage County and Nursing Home Services in Cook County referred applications for LTC assistance meeting certain pre-defined criteria to a special team that conducted in-depth financial investigations. Phase I did a review of 184 Long Term Care applications with a discovery of $1,027,507 in undisclosed assets. After the applicable asset exemptions allowable under state policy were applied, the savings totaled $597,099. Those savings came at a total cost of $216,117, culminating a net savings of $380,982 with a benefit/cost ratio of 2.76:1 (benefits 2.76 times greater than costs).

Because of the success of Phase I, the Department decided to initiate a second phase of the project. Besides identifying undisclosed income and/or assets, identifying unallowable asset transfers and conducting a benefit/cost analysis, Phase II included ancillary savings, a deterrence analysis and an error-prone profiling analysis.

During Phase II, which began in May 1997, the Office of Inspector General (OIG) reviewed 603 LTC applications from the same two local offices and discovered $2,238,030 in undisclosed assets with savings of $1,192,538. Additional savings of $2,288,097 were realized by the withdrawal and/or denial of 29 applications as a direct result of the investigation, resulting in a total savings of $3,480,635. Costs for this project totaled $1,046,528 resulting in a net total of $2,434,107 in savings to the state of Illinois. The benefit/cost ratio was 3.32:1 (benefits 3.32 times greater than costs).

The error-prone profiling analysis suggested that there are a number of characteristics of the applicant that are associated with failure to disclose assets. A statistical model based on this analysis could help OIG use its investigative resources more effectively by identifying those applicants who are likely to have undisclosed assets. Doing so, however, would require changes to the Automated Intake System (AIS) to incorporate new questions that indicate unreported assets and the associated programming changes.

LTC-ADI revealed that the state’s screening of LTC applications for undisclosed assets could be improved. If this project were expanded to include the entire state, the projected annual gross savings would be approximately $9 million. To the best of our knowledge, no other state has undertaken such a project.

As a result of the pilot project, we recommend that IDPA and IDHS develop a plan to improve
and enhance the LTC eligibility determination process. This discussion should include a comprehensive review of policy issues pertaining to eligibility determinations of LTC cases and the development of a LTC asset discovery protocol.
INTRODUCTION

The LTC costs of $1.3 billion in Federal Fiscal Year (FFY) 1997 represented 31 percent of the Illinois Medicaid budget. Past Quality Control (QC) reviews disclosed that LTC eligibility errors contribute the largest percentage of overpayments in the Medicaid Eligibility Quality Control (MEQC) program. Typically, the primary cause of these overpayments is that clients failed to disclose their assets during the LTC application process and erroneously received Medicaid eligibility. Also, even if reported, assets were often budgeted inaccurately when determining LTC eligibility. With such a large number of errors attributable to undisclosed assets, IDPA decided to focus on the LTC application process. The Department’s OIG designed a new investigative procedure which, if applied statewide, has the potential to lead to considerable savings through cost avoidance for the state of Illinois.

HISTORY

Prior to 1993, many LTC applications were completed by nursing home personnel. Some effort was made to interview the applicant and/or a family member, but this procedure was not enforced. In August 1993, the policy was changed to require LTC applicants to be interviewed (if able) as part of the application process. In July 1994, the Division of Field Operations Outcomes Assessment (OA) staff reported that this policy was not being followed.

An inter-divisional work group addressed this problem by first recognizing the perception that some applicants were unable to be interviewed. To counter that, the work group created a hierarchy of interviewees. This included, in descending order, the applicant, spouse, other family members, powers of attorney, family friends and LTC facility representatives. The hierarchy proved quite useful.

During the creation of an interviewing hierarchy, the work group noticed the need for other improvements in the LTC application process. Strategies were developed to identify undisclosed assets which should be available to the Department to help meet the needs of the applicants, to identify potential types of error prone cases, and to investigate the availability of assets to LTC applicants. The work group also developed a supplemental questionnaire--Additional Financial Information for LTC Applicants (DPA 3654)--to be completed by LTC applicants or their representatives. This questionnaire proved to be an invaluable tool. It was used to gather more detailed information needed to determine which applications were error prone (i.e., likely to have undisclosed assets which could be applied to the cost of long term care) and should be referred for investigation. It also provided initial leads to the investigators.

Finally, the work group agreed to try to determine how serious a problem failure to disclose assets really was. OIG and IDHS’ field operations staff conducted in-depth investigations of 184 applications. This effort (now known as Phase I) revealed dramatic results: more than a million
dollars in undisclosed assets, almost $600,000 of which should have been applied to the cost of the applicant’s care. The cost-benefit ratio showed the state could save $2.76 for every $1.00 it spent on such efforts.

Phase I’s results indicated that asset discovery measures utilized in LTC-ADI were cost-justified. Compelling evidence exists that a follow-up LTC-ADI could be structured in a manner that would produce even greater return on investment.

INITIATIVE

A decision memorandum, signed by the Director of IDPA on April 6, 1997, allowed the OIG to conduct Phase II of the LTC-ADI to collect more precise information on cost-effectiveness and to increase the sample size for error-prone profiling.

Phase II began May 1, 1997. IDHS local offices of DuPage and Cook (Nursing Home Services) screened 7,610 LTC applications. Of these, 603 were referred for investigation. The use of existing staff allowed this project to be completed at no additional expenditure to the Department of Public Aid and also satisfied the continuing Federal MEQC requirement. In preparation for this project, QC reviewers and supervisors received three days of Medicaid Advanced Asset Policy training.

Four objectives were targeted for Phase II: (1) develop a more precise assessment of the cost-effectiveness of using asset discovery specialists; (2) determine whether additional or refined error-prone criteria could be used for future selections assuming the initiative is adopted statewide by the Department; (3) determine whether the project deterred individuals from submitting applications or caused them to withdraw their applications prior to being referred for investigation; (4) and satisfy the federal requirement to conduct MEQC.

Phase II continued the search for assets through reviews of LTC applications meeting error-prone criteria. Five error-prone criteria were chosen because they accounted for the highest dollar value of errors discovered through the traditional MEQC process. The questionnaire (DPA 3654), designed by the work group from Phase I, included these error-prone criteria areas. Applicants applying for LTC assistance in the DuPage County and Nursing Home Services in Cook County were required to complete this questionnaire at intake.

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1 This requirement consists of completing approximately 1,750 MEQC reviews during a period of one year or the equivalent of 12,775 hrs per year.
Applications that met these pre-determined error-prone criteria (based upon the judgement of the caseworkers) were referred to IDPA’s Bureau of Quality Control (BQC). QC reviewers were given 60 days in which to complete their investigations. These investigations were comprehensive and included reviews of several years of bank statements and tax returns, property checks, financial institution inquiries and other inquiries that might lead to undisclosed assets. These investigations were time consuming, yet effective in identifying undisclosed assets. The last case was completed on April 16, 1998.

INTERVIEWS

To substantiate the benefits of using the interviewing hierarchy created by the work group, we analyzed the cases in Phase II that produced LTC room and board savings of more than $10,000 per case. These 64 cases produced savings of $2,674,084. Of these 64 cases, 50 cases (78 percent) consisted of interviews with either the applicant, spouse, son or daughter. These 50 cases had savings of $2,034,564. Interviewing a member of the immediate family, including the applicant, proved valuable when searching for assets.

During these interviews and throughout the investigations, most representatives and/or family members were cooperative. Some applicants and/or representatives were aware of the special investigative review process being conducted on their case. The DuPage County office often informed the applicants. Others believed that the local office had completed their case at the initial intake interview and were not aware that their case was being reviewed by a special investigative team. However, many relatives believe that they are entitled to the assets of their elder family members and they conclude that their mere presence in the home (regardless of whether they provided nursing or support services to the applicant) should result in ownership of the applicant’s property.

BENEFIT/COST ANALYSIS

Findings

A total of 603 cases were reviewed, with savings discovered on 139 cases. Of these 139 cases, assets were discovered or unallowable asset transfers were identified in 110 cases and 29 cases were either withdrawn or denied for reasons related to this project. Besides calculating LTC room and board savings for these cases, we calculated savings for ancillary medical services (e.g., physicians, prescriptions, transportation, etc.). Only 31 of the 139 cases were subject to ancillary

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2 The Cohen court order requires that 96% of all Medicaid only applications be processed within 45 days and 60 days for disability cases. Because LTC-ADI cases represented only a portion of all Medicaid cases, using a 60 day time frame helped ensure that we did not exceed the Cohen threshold.

3 One hundred and thirty-nine cases contributed to the $2,825,729 in savings discovered. Of these 139 cases, 64 cases produced savings of over $10,000 per case.

4 Applicants withdrew their case after learning of the investigative process or cases were denied because information needed to complete the investigation was not provided.
LTC-ADI II

<table>
<thead>
<tr>
<th>SAVINGS/COSTS</th>
<th>CASES</th>
<th>DOLLARS</th>
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<tbody>
<tr>
<td>LTC Savings discovered from undisclosed assets or asset transfers *</td>
<td>110</td>
<td>$1,150,286</td>
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<tr>
<td>Ancillary Savings (only 2 cases)**</td>
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<td>42,252</td>
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<tr>
<td>Subtotal</td>
<td></td>
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<tr>
<td>LTC Savings from withdrawal or denial of applications ***</td>
<td>29</td>
<td>$1,675,443</td>
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<tr>
<td>Ancillary Savings (all 29 cases)**</td>
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<td>612,654</td>
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<tr>
<td>Subtotal</td>
<td></td>
<td>$2,288,097</td>
</tr>
<tr>
<td>Total Savings</td>
<td>139</td>
<td>$3,480,635</td>
</tr>
<tr>
<td>Total Costs (all 603 cases)</td>
<td></td>
<td>1,046,528</td>
</tr>
<tr>
<td><strong>Net Savings</strong></td>
<td></td>
<td><strong>$2,434,107</strong></td>
</tr>
</tbody>
</table>

*Savings for these cases ranged from actual savings of $8 to an estimated lifetime limit of $57,774.
**These savings were estimated at $21,126 per case.
*** Savings for these cases were estimated at $57,773.89 (rounded-$57,774) per case.

The benefit/cost ratio was 3.32:1 (benefits of this pilot project were 3.32 times greater than costs) based on estimated savings of $5,772 per case and estimated costs of $1,736 per case. This represented an average net savings of $4,036 per case.

5 Only cases without a spend down or a penalty period were subject to ancillary savings.

6 A benefit/cost ratio equal to 1 means that the benefits equal the costs. A ratio greater than 1 means that the benefits exceed the costs proportionately to the ratio.
The methodology used to calculate the savings for the 110 cases was similar to that used in Phase I. BQC managers reviewed each case having undisclosed assets to determine what the spend down amount would have been had the application disclosed the assets. Income and assets were accounted for in relation to the spousal impoverishment exemption, the $2,000 asset disregard (asset amount that the applicant is allowed to possess and is exempt from budgeting), and other asset limitations.

Discovery of asset transfers occurring closer to the date of LTC application produced greater savings. Current federal policy mandates the application of a penalty period begins the month that assets were transferred and applies these assets to each month thereafter until the assets have been considered spent. The applicant is then considered eligible for medical assistance.

As with Phase I, we encountered cases in which undisclosed assets exceeded the maximum lifetime expenditure estimate for LTC cases. Using data available, we estimated savings for these cases based on the average estimated duration of cases on Medicaid and IDPA payments for similar cases. The mean expected lifetime length of stay (2.81 years) was multiplied by the average yearly IDPA LTC payment ($20,560) for a savings of $57,774 per case.\textsuperscript{7} There was no basis for inflating the LTC payment for future changes although this would have been desirable. Eight cases were subject to the lifetime limit.

Among the 603 cases reviewed, 54 cases were withdrawn or denied. Review of those 54 cases indicated that 29 applicants withdrew or were denied as a direct result of this pilot project; they withdrew after they learned of the investigation, or they were denied because information needed to complete the investigation was not provided. If the LTC applications for each of these 29 cases would have been approved, we estimate (using the same calculation methodology mentioned above) that $57,774 per case would have been paid for LTC room and board. We determined that the remaining 25 cases would not have produced any savings; the applicant died after application and before entering the LTC facility, the applicant moved out of Illinois, or the applicant had a short LTC facility stay.

Besides calculating savings for LTC room and board, we estimated savings for ancillary medical services. The mean expected lifetime length of stay (2.81 years or 33.72 months) was multiplied by the average monthly IDPA ancillary payment of $626.51 for a savings of $21,126 per case.\textsuperscript{8} Only 31 cases were subject to these savings.

\textsuperscript{7} The lifetime length of stay and LTC rate information applicable to IDPA cases was supplied by the Bureau of Program and Reimbursement Analysis.

\textsuperscript{8} The average monthly IDPA ancillary payment of $626.51 was computed using information from the IDHS’ Bureau of Research and Analysis.
Costs

Costs of $1,736 per case were determined by dividing the total costs of $1,046,528 (see Appendix II) by the total number of cases reviewed (603). A change from Phase I was the inclusion of health and life insurance costs of $5,300 per person. Also, travel costs were calculated based on actual travel expenditures for the participating employees rather than estimates. Workers’ compensation and some other costs paid for through the Department of Central Management Services are still not included.

DETERRENCE ANALYSIS

It was hypothesized that LTC applicants would learn of the new investigative process before application, and that the number of LTC applications would decrease in DuPage and Cook during the project, compared to the number of applications received before the project. That “deterrence effect” hypothesis could not be proven, although (as previously noted) 29 applicants did withdraw and/or were denied after beginning the application process.

Both the first and second phases of LTC-ADI were pilot projects. As a consequence, the Department did not aggressively publicize information about the initiative either at the local offices or in the media. Data limitations aside, it is not surprising that a statistically significant effect was not observed. In the event that the Department adopts this project as a permanent statewide initiative, a campaign to publicize it to potential applicants and their families may result in additional savings beyond those identified by this review activity.

ERROR-PRONE PROFILING ANALYSIS

The Bureau of Fraud Research (BFR) developed a prediction model that could improve the case selection process. This model identified a number of characteristics that are associated with failure to disclose assets. The model could help OIG use its investigative resources more

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9 The scope and precision of our analyses were limited by the small sample size available.
effectively by screening out those applications that are unlikely to be erroneous. The current Automated Intake System (AIS) used to process applications, would require significant changes by adding the questions necessary to obtain the needed data. Programming changes would also be required (based on both portions of the original selection criteria and the BFR statistical model) to identify and refer applications for review.

A detailed discussion of the analysis is presented in Appendix III of this report.

**NATIONAL COMPARISONS**

To determine the uniqueness of this project, a brief review was conducted on MEQC pilot projects pertaining to the LTC eligibility process of 27 other states. Three states have conducted pilot projects with similarities to this project, including attempts to identify error-prone cases after application and asset reviews conducted within the first three months of eligibility. It appears that no other state has conducted detailed asset investigations on LTC cases prior to their approval.
RECOMMENDATIONS

Both the Departments of Human Services and Public Aid agree that more can be done to prevent ineligible persons from receiving long term care benefits when they fail to properly disclose assets. Accordingly, the two Departments should commit to formulating a plan to improve the LTC eligibility determination process. This discussion should include but not be limited to the following issues:

- Expanding asset discovery efforts statewide.
- Developing error-prone profiling to facilitate successful identification of suspicious applications and their subsequent referral for investigation.
- Reinstating the position of Resource Consultant to be trained in various aspects of financial issues.
- Researching privatization of asset discovery efforts along the lines of the Fraud Prevention Investigations Initiative.
- Mandating the acquisition of complete financial information during the LTC application process.

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10 The recommendations contained within this report have been reviewed by IDHS’s and IDPA’s Executive Staff as well as various staff from the Division of Medical Programs (DMP). Unless otherwise noted, those entities either did not comment on individual recommendations or supported them. Some comments on the draft recommendations are included in boldfaced italics.
CONCLUSION

As we enter a new millennium and more baby boomers begin approaching their “golden years,” the number of applicants for LTC assistance will increase dramatically. As the number of applicants increases, attempts to hide assets or transfer assets to become eligible for LTC assistance will likely grow. A pro-active, cost-effective approach will be vital to control fraud and maintain the integrity of the Illinois Medicaid Long Term Care Program. As Phase I and II of the LTC-ADI have proven, this unique initiative builds on Illinois’ strong track record and provides a stepping stone to improve the integrity and efficiency of the Medical Assistance Program.

By striving to reduce fraud in the Medicaid system, we face the risk of obscuring our ultimate goal: assisting Illinois’ citizens in need. However, Phase I and II of the LTC-ADI continued to aid Illinois’ needy while simultaneously maintaining program integrity and revealing undisclosed assets and improper/unallowable asset transfers. With the use of a special error-prone criteria review, the Office of the Inspector General, in collaboration with the Department of Human Services, was able to successfully target LTC applications with undisclosed assets and prevent erroneous payments, saving Illinois taxpayers $2.78 million.

With the use of specialized investigators, standardized data collection forms and a further refined error-prone criteria review, this initiative can serve as the catalyst to decrease costs and enhance integrity of the LTC application process. With the increased LTC population expected in the 21st century, improvement of the eligibility process could yield significant savings to Illinois taxpayers.
APPENDIX I: SPECIFIC RECOMMENDATIONS

Developments/Enhancements

• Expand the asset discovery initiative statewide. **Deputy Director Handy suggested that the issue of timely application dispositions be considered.** Cohen requires that 96% of Medicaid applications be processed within the required time frame of 45 days (60 days for disability cases).

• Research the viability of privatizing the asset discovery function.

• Continue the work of the first two ADI phases in developing error-prone profiling to facilitate the successful identification of suspicious applications.

• Reinstate the position of Resource Consultant to be trained in various aspects of financial investment, such as trusts, life estates and stock accounts. **DHS recommends that one consultant be placed in Nursing Home Services and in each of the four downstate regions.**

• Create a brochure for distribution at intake screening. This brochure would describe in detail the asset discovery process to which the LTC application may be subject so as to encourage disclosure of assets or discourage making an erroneous application.

• Design an automated, comprehensive, uniform application form, including questions from the DPA 3654 that concentrate on asset disclosures. This form could be used to screen all LTC applications prior to eligibility being established.

• Automate the information available to the IDPA from the Illinois Department of Revenue to facilitate verification of state tax information. (This information is vital for verifying whether federal tax returns were filed within the last three years. If filed, these returns are one of the best tools for securing information regarding assets/income.) **DHS strongly supports this recommendation.**

Investigative Process/Verifications

• Improve application interviewing techniques of caseworkers. Among the various LTC application materials used, questions were frequently left unanswered and inconsistencies were found in the information provided. **DHS intends to address improved interview techniques as part of its Human Service casework training.** **DMP strongly supported this recommendation to make workers more accountable.** **DMP also suggested expanding the interview process to include nursing facility staff who are often aware of income or asset information of residents.**

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11 Currently (according to DHS), (1) this position is now called Property Consultant; (2) there are approximately five of these positions left (metro only), and (3) these positions are not filled when vacated.
• Standardize verification requirements throughout the state. All LTC applicants should provide three years of financial records such as: state and federal tax returns, investments, and copies of any loan applications submitted. Require only a full year of detailed monthly bank statements for every bank account declared. (Banks often purge records after 1 year making record retrieval more time consuming. In addition, a fee is often charged.) DHS believes that policy changes in the area of required verifications such as these would provide critical support to the IDHS local offices. Deputy Director Handy did not concur with this recommendation, noting that federal law requires that the Department request information which is relevant to determinations concerning eligibility. [We will refer this issue to the Office of General Counsel.]

• Complete routine property checks for all addresses for a three-year period prior to the LTC application.

• Ask for LTC insurance information.

Policy/Legislation Issues

• Change the method for determining penalty periods (period of ineligibility prior to the initiation of LTC assistance payments). Each penalty period now begins with the month of transfer (or with the month following the month a prior penalty ends). An alternate method for new applications would be to establish the month of application as the first month of the penalty period regardless of the month and year in the established “look back” period the transfer actually occurred. For current active cases, use the month of discovery as the first month, since all LTC charges prior to discovery would have been paid by Medicaid. Encourage repayment to keep Medicaid eligibility continuous. Although DHS believes that changing the method of determining the penalty period might be an undue hardship on the applicant/client, it does concur that repayment should be encouraged to keep continuous Medicaid eligibility. Deputy Director Handy noted that this change would require either a federal law change or a waiver of the current requirement.

• Change the manner in which the penalty period is applied so that small-dollar transfers would be available to pay recipients LTC costs. An unallowable transfer now must equal one full month of ineligibility to be considered. Therefore, small-dollar transfers are not available to the Department but could be used as a group care credit. DMP is concerned that this might be administratively burdensome.

• Inform the applicant/representative that if any improperly transferred asset is returned and listed on the application for LTC benefits, no penalty will be imposed for the improper transfer.

• Revise IDHS/IDPA policy (PM 07-02-19b) regarding the transfer of homestead property to the applicant’s child who provided care (either nursing or support) to the applicant and lived in the homestead property for at least two years prior to the date the applicant
entered the nursing home. The terms “nursing” and “support” need to be redefined. *DHS believes this policy clarification would benefit the IDHS local office greatly.*

- Clarify the statement of accountability currently on the LTC application form in order to explicitly state the penalties and consequences of willful non-disclosure of assets. The vagueness of the current attestation statement prevents successful prosecution. *DMP agrees with this recommendation.*
## APPENDIX II: COST COMPONENTS

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</tr>
</thead>
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<td>Rent/Utilities</td>
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<tr>
<td>Commodities</td>
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<tr>
<td>Printing</td>
<td>15,250</td>
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<tr>
<td>Office Equipment (maintain)</td>
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<tr>
<td>Data Processing (maintain, upgrade)</td>
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<tr>
<td>Telecommunications</td>
<td>4,615</td>
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<tr>
<td>Travel Costs</td>
<td>15,542</td>
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<tr>
<td>Employer Retirement Costs (10.5% of Salary)</td>
<td>74,054</td>
</tr>
<tr>
<td>Employer’s Share of FICA tax (7.65% of Salary)</td>
<td>53,950</td>
</tr>
<tr>
<td>Group Insurance-Health and Life</td>
<td>88,621</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$1,046,528</strong></td>
</tr>
</tbody>
</table>

*Figure for salaries includes a total of 27 employees; 1 Senior Public Service Administrator, 1 Public Service Administrator, 5 QC Supervisors, 19 QC Reviewers and 1 Office Associate. The majority of the reviewers are at the top of their pay scale.
The analysis conducted by the Bureau of Fraud Research (BFR) used almost 100 variables to identify those that are predictors of applications with more than $1,000 in undisclosed assets. A formal statistical technique (backward stepwise logistic regression) was used to identify about twenty variables that were included in the final prediction model.

Given the substantial payoff realized when an erroneous case is found and the large percentage of cases with no undisclosed assets, the model was used to identify cases with a low probability of being erroneous. If successful, such a model could be used to screen out large numbers of cases that are unlikely to have undisclosed assets and allow reviewers to focus on the more promising cases.

For example, using a 16 percent probability threshold, a far greater percentage of cases with undisclosed assets are classified correctly (65.4 percent of cases, as opposed to 4.8 percent of these cases when the 50 percent probability threshold is used) while a lower percentage of the cases without undisclosed assets is classified correctly (58.1 percent, as opposed to 97.8 percent when the 50 percent probability threshold is used). Overall, the model correctly classifies fewer cases at the 16 percent probability threshold than at the 50 percent threshold (59.4 percent, as opposed to 81.6 percent) but does better at identifying the cases we are concerned about.

While classification of cases made on the basis of higher thresholds (those greater than 16 percent) would increase the overall accuracy of the model, such classifications would decrease our ability to identify cases with undisclosed assets.