



AMERICAN INSTITUTES FOR RESEARCH

**THE VERIFICATION PROCEDURES
OF THE QUALITY ASSURANCE
PROGRAM INSTITUTIONS**

Prepared by:
American Institutes for Research

for:
Federal Student Aid
U.S. Department of Education

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I. INTRODUCTION

The Quality Assurance (QA) Program allows all higher education institutions to regularly examine and review their student financial aid delivery systems. Although the “Tools for Schools” developed by the program are designed for all institutions to use, only those formally participating in the QA Program are granted regulatory relief from federally prescribed verification. These QA Program institutions are required to develop their own institutional verification procedures to ensure accuracy in awarding Title IV funds. In exchange for this flexibility, participating institutions share data with the U.S. Department of Education. These data are used to conduct program-wide analysis.

This report is based on such information provided by institutions participating in the QA Program during spring 2002. The information is based on processing data for the 2002–2003 academic year. For the first time, data have been compiled about the actual verification practices of QA Program institutions. In the past, data focused on documenting good stewardship of Title IV funds by program participants, who are granted regulatory relief from following federally prescribed verification. With the transition to a new program methodology and accompanying Quality Analysis Tool, analyzing specific verification practices is now possible. This report describes how QA participants select aid applicants for verification. Because these institutions are still verifying applicants’ information as this report was prepared, it does not examine the effectiveness of different practices employed by participating institutions.

Specifically, this report analyzes the characteristics of the institutional verification profiles being used by QA Program institutions to ensure the accuracy of need-based Title IV aid during the upcoming 2002–2003 academic year. Data were submitted by 136 institutions. Because the process of contacting students selected for verification and correcting the Free Application for Federal Student Aid (FAFSA) information is still going on as this report is being written, we focus on the variety of practices employed rather than on their consequence for aid eligibility. An analysis of the consequences of verification is not possible until the corrections discovered through verification are reflected in revised Institutional Student Information Records (ISIRs), which generally become available during the late summer.

The Quality Analysis Tool

The Quality Analysis (Verification) Tool allows Title IV institutions to compare “initial” and “paid-on” ISIR transactions. The software allows users to produce a number of reports that examine changes observed in the information reported on the FAFSA. These analyses help institutions identify which ISIR elements are most problematic among their aid recipient population. Institutions participating in the QA Program use the knowledge gained from this exercise to fine-tune their own verification procedures. The Tool also helps identify which FAFSA instructions may need modification or clarification. All Title IV institutions and students can benefit from this type of analysis. Postsecondary institutions not yet participating in the QA Program can use the Tool to evaluate the effectiveness of the federally prescribed (CPS) verification edits.

Postsecondary institutions use the Quality Analysis Tool to help them understand which changes to FAFSA fields make a difference to a student’s expected family contribution (EFC) and Pell Grant eligibility. To perform substantive analyses, users must import two sets of ISIRs—an “initial” set of records and then “paid-on” records—to evaluate changes in data initially reported on the FAFSA versus “verified” data. During spring 2002, institutions laid the groundwork for this analysis of 2002-2003 awards by entering their verification procedures into the Tool.

After importing final “paid-on” information in fall 2002, institutions will be able to find out whether they are targeting the right subpopulations for verification. That is, are students selected for verification likely to experience a significant change to EFC and Pell Grant eligibility? With the benefit of this information, an institution can do the following:

- Develop institutional verification criteria that fit its particular population
- Learn which application errors occur locally, and educate students and parents about them
- Identify and strengthen verification practices that make a difference in aid awards
- Identify and eliminate verification practices that take time but make little or no difference in final awards

The second version of the Quality Analysis Tool is currently available to analyze changes to financial aid eligibility stemming from verification efforts for financial aid awards that will be made in the 2002–2003 academic year. The Tool represents a major accomplishment in the transition of the Quality Assurance Program from ensuring effective stewardship of Title IV resources by a select handful of institutions to enhancing the compliance efforts of the entire Title IV community.

The Quality Analysis Tool is a work in progress and must continue to increase its capacity to meet the analytical needs of both Federal Student Aid (FSA) and individual postsecondary institutions. By improving the analysis and by sharing information about verification practices between institutions and the government, the Tool promises to improve verification efforts system-wide both in terms of accuracy (by making sure that students whose aid eligibility would be affected are verified) and efficiency (by minimizing the number of students who are selected for verification without a resulting change to need-based aid awards).

Description of the Data Being Analyzed

This report analyzes two sets of information:

- *Verification Edit Profile Setup Report* generated with the Quality Analysis Tool
- Institutional descriptions of limitations they encountered with the Quality Analysis Tool software in accurately describing their institutional verification procedures

All 144 Title IV institutions participating in the Quality Assurance Program were asked to share their verification procedures with FSA’s operating partner, the American Institutes for Research (AIR). Institutions were given step-by-step instructions on how to use the Quality Analysis Tool to enter and submit their verification practices. Data were provided between March 14, 2002, and May 7, 2002. In the end, 136 institutions had submitted the required information, yielding a response rate of 94 percent.

The process began with institutions creating queries in the software that mirrored their actual verification practices. The Quality Analysis Tool has the capacity to express logical conditions using ISIR fields in the form of queries. AIR prepared detailed instructions, with examples, for using the query functionality of the software. Additional resource documents

explaining how to write and use queries were available on the QA Program's website. In addition, several training sessions on query writing were well attended at the joint QA Program Experimental Sites conference in March 2002.

Once built, the queries that institutions use to select applicants for verification were established as "edit profiles." The instructions prepared by AIR walked institutions through the four-step process for translating each query into a verification edit profile.

After establishing their verification edit profiles, institutions were instructed how to print the *Verification Edit Profile Setup Report* and share an electronic version of this report with AIR. This report consisted of a listing of each verification profile used by an institution, including the specific logical condition that triggers verification. AIR provided institutions with step-by-step instructions for generating the report and created an e-mail account, qaverify@air.org, to receive institutions' submissions.

In addition to submitting the *Verification Edit Profile Setup Report*, institutions were invited to share limitations they had encountered with the QA Analysis Tool software in creating queries for their verification process. AIR requested that this information be shared in a separate text file. AIR received reports of limitations with the software from 22 institutions.

Organization of This Report

Following this introduction, the report is organized in three sections. Section II examines the institutional verification practices of the QA Program institutions, focusing on the ISIR fields used by institutions to select applicants for verification. Section III examines the capacity of the Quality Analysis Tool software to capture the various institutional verification procedures, describing the limitations reported by institutions and offering suggestions for enhancing the next version of the software. Section IV, the conclusion section, summarizes empirical findings and implications for the QA Program.

II. THE VERIFICATION PRACTICES OF THE QUALITY ASSURANCE PROGRAM INSTITUTIONS

What procedures do institutions follow when flagging applicants for verification? What fields do they rely on most often? How elaborate are their verification procedures? In this section we answer these questions by examining the makeup of verification profiles used by QA Program institutions to select applicants for verification. Specifically, we examine the content of verification profiles in terms of 22 specific ISIR fields. We also tabulate in a 23rd “other” category all other ISIR fields used in the verification profiles of QA Program participants.

The specific ISIR fields we examined are the 16 data elements on the Quality Analysis Tool’s “dependent verification worksheet.” These fields have a direct bearing on EFC calculation and include reports of eight key data elements for both parents and students:

- Number of family members
- Number in family members in college
- Type of tax return
- Adjusted gross income (AGI)
- U.S. taxes paid
- Worksheet A
- Worksheet B
- Worksheet C

We also examined six additional data elements frequently used by institutions in their verification procedures:

- Parents’ income tax return filing status
- Student’s income tax return filing status
- Student’s dependency status
- Expected family contribution (EFC)
- Marital status (of student and/or parent)
- Selection for CPS verification

Finally, we tracked the use of any other ISIR or user database field in an “other” category.

Which ISIR Fields Are Used to Flag Applicants for Verification?

AIR used two distinct levels of analysis to examine the information submitted by QA Program institutions. First, we analyzed the prevalence of specific fields in the 974 verification profiles submitted by institutions. Second, we examined the prevalence of specific fields among the 136 institutions.

These two sets of analyses were necessary because of variation in how institutions create verification profiles within the Quality Analysis Tool. Users of the Tool have the option of using the result of one or more queries to define a single verification profile. Further, the queries themselves may contain a single logical condition or multiple logical conditions. Therefore, it is possible for institutions to express their entire verification procedures in a single profile—no matter how complex—or in a multitude of simple, individual profiles. The fact that reports available within the Quality Analysis Tool support the analysis of each individual profile provides a motivation for institutions to define their verification profiles narrowly. Among the 136 submissions, very few institutions combined multiple logical conditions used for verification into a single profile. Most institutions had a separate profile for each logical component of their verification process.

Profile Level Analyses

The data in this section are based on 974 verification profiles gathered from 136 QA institutions. The frequencies and percentages presented here count the number of profiles that include a given ISIR field. If an institution used the same field in multiple profiles, the field was counted multiple times. Table II.1 presents the percentage of profiles using each of the 23 types of fields.

**Table II.1:
Percent of Verification Profiles Using Each of the Following Fields in its
Verification Queries (N=974)**

ISIR FIELD	PERCENT OF PROFILES USING FIELD
Parents' number of family members	2.2
Parents' number in college	4.3
Parents' filed tax return	13.6
Parents' type of tax return	2.4
Parents' adjusted gross income	17.6
Parents' U.S. taxes paid	6.8
Parents' worksheet A	4.1
Parents' worksheet B	5.0
Parents' worksheet C	5.6
Student's number of family members	5.7
Student's number in college	3.7
Student's filed tax return	14.4
Student's type of tax return	2.3
Student's adjusted gross income	17.1
Student's U.S. taxes paid	6.4
Student's worksheet A	4.1
Student's worksheet B	4.6
Student's worksheet C	6.5
Dependency Status	56.5
Expected Family Contribution	31.1
Marital Status (Parent or Student)	12.9
Selected for CPS verification	4.9
Other	61.4

These results suggest that there is little commonality across institutional profiles in the fields used for verification. Of all 22 individual fields examined (excluding the “other” category), only one field, “dependency status,” is used in more than 50 percent of verification profiles. Note that the “other” category count reflects a number of different fields. As we discuss below, there are clear patterns in which particular “other” fields are used. The next most commonly used field, “expected family contribution,” is used in 31 percent of verification profiles, and the third most commonly used field, “parents’ adjusted gross income,” is used in

only 18 percent of verification profiles. Only four additional fields, “student’s adjusted gross income,” “student’s filed tax return,” “parents’ filed tax return,” and “marital status (parent or student)” are used in 10 percent or more of institutional verification profiles. Conversely, 15 fields are used in fewer than 10 percent of verification profiles.

Table II.2 looks at the distribution of the total number of fields used per verification profile—again based on all 974 verification profiles submitted by QA Program participants. This distribution can be seen as an indicator of how elaborate the institutional flagging procedures are.

**Table II.2:
Distribution of Total Number of Verification Fields Used Per Profile (N=974)**

NUMBER OF FIELDS USED IN PROFILE	FREQUENCY	PERCENT	CUMULATIVE PERCENT
1	229	23.5	23.5
2	223	22.9	46.4
3	237	24.3	70.7
4	128	13.1	83.9
5	87	8.9	92.8
6	41	4.2	97.0
7	10	1.0	98.1
8	4	0.4	98.5
9	3	0.3	98.8
10	4	0.4	99.2
11	3	0.3	99.5
12	1	0.1	99.6
14	2	0.2	99.8
16	1	0.1	99.9
18	1	0.1	100.0

Table II.2 indicates that most institutions defined their verification profiles relatively narrowly. Approximately one-quarter (24 percent) of all verification profiles use only one field to flag applicants for verification, and almost half (46 percent) use no more than two fields. Overall, 93 percent of institutional profiles rely on five or fewer fields in their verification

queries to flag applicants. The maximum number of fields used by institutional profiles is 18. This maximum occurs in only one profile, and fewer than 1 percent of all institutional profiles use 10 fields or more in their verification procedures. These “complicated profiles” are generally the result of institutions’ reporting multiple criteria in a single profile, rather than an indication of an elaborate logical condition. Note that only a few institutions reported the information in this manner.

Institutional Level Analyses

Although the previous section examined the verification practices contained in individual profiles, it did not provide a picture of what the QA institutions as a whole do in terms of flagging students for verification. To provide such a perspective, the data used in this section are analyzed at the institution level. The frequencies and percentages presented here count the number of institutions that include a given ISIR field in at least one of their verification profiles. If an institution uses the same field in multiple profiles, it was counted only once. Table II.3 presents data on the percentage of QA Program institutions using each of the ISIR verification fields in at least one of their verification profiles.

Not surprisingly, the percentages are higher when we look at counts at the institution level, yet the three most commonly used fields are identical to results at the profile level, namely, “dependency status” (59 percent), “parents’ adjusted gross income” (56 percent), and “expected family contribution” (54 percent). Only two additional fields are used by at least 40 percent of institutions: “student’s adjusted gross income” and “parents’ filed tax return.”

In addition, several verification fields are used by only a handful of institutions: “student’s type of tax return” (9 percent), “parents’ type of tax return” (11 percent), and “parents’ number of family members” (14 percent).

**Table II.3:
Percent of QA Program Institutions Using Each of the
Following Fields in its Verification Queries (N=136)**

VARIABLE	PERCENT OF SCHOOLS
Parents' number of family members	14.0
Parents' number in college	23.5
Parents' filed tax return	44.9
Parents' type of tax return	11.0
Parents' adjusted gross income	55.9
Parents' U.S. taxes paid	36.0
Parents' worksheet A	19.9
Parents' worksheet B	25.0
Parents' worksheet C	33.1
Student's number of family members	19.9
Student's number in college	16.2
Student's filed tax return	39.7
Student's type of tax return	8.8
Student's adjusted gross income	44.9
Student's U.S. taxes paid	26.5
Student's worksheet A	17.6
Student's worksheet B	19.1
Student's worksheet C	32.4
Dependency Status	58.8
Expected Family Contribution	54.4
Marital Status (Parent or Student)	34.6
Selected for CPS verification	20.6
Other	77.2

Institutions also vary in how many verification criteria they include in a single verification profile. Therefore, to assess the complexity of the verification procedures at QA Program institutions, we examined the total number of different fields that institutions refer to in their verification procedures, regardless of the number of verification profiles they use. Table II.4 presents the distribution of the number of different ISIR fields that QA Program institutions use to select applicants for verification.

**Table II.4:
Distribution of Total Number of Different Fields That QA Program Institutions
Use in Their Verification Queries (N=136)**

NUMBER OF FIELDS	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
1	17	12.5	17	12.5
2	10	7.4	27	19.9
3	10	7.4	37	27.2
4	7	5.2	44	32.4
5	11	8.1	55	40.4
6	16	11.8	71	52.2
7	10	7.4	81	59.6
8	5	3.7	86	63.2
9	5	3.7	91	66.9
10	5	3.7	96	70.6
11	10	7.4	106	77.9
12	9	6.6	115	84.6
13	4	2.9	119	87.5
14	4	2.9	123	90.4
15	4	2.9	127	93.4
16	3	2.2	130	95.6
17	1	0.7	131	96.3
18	3	2.2	134	98.5
21	2	1.5	136	100.0

The results reflect substantial variation in the verification practices of QA Program institutions. Slightly more than half (52 percent) use six or fewer fields (out of a possible 23) in their verification procedures. The modal category (i.e., the one used by most institutions) is six fields, with 12 percent of QA institutions using that number in their verification queries.

One institution in eight (12.5 percent) uses only a single field in flagging applicants for verification. Most of the single-field institutions are new to the QA Program and are following federally prescribed verification during 2002–2003. Hence, 10 of the 17 institutions that reported using a single field use “selected for CPS verification.” After analyzing the results of federal verification on their campus with the Tool, these new institutions will likely begin to create their

own additions and subtractions to federal verification. At the other end of the spectrum, 10 percent of reporting QA Program institutions use 15 or more fields.

How Are ISIR Fields Used to Select Applicants for Institutional Verification?

The previous section examined the number of times that specific ISIR fields were used in verification profiles by institutions, but did not address how the institutions used this information. By combining the way ISIR fields are used with the verification profiles, we detected two basic strategies that QA Program institutions use to select applicants for verification.

The first strategy is to select some subset of students believed to be at risk for error. The second method is to select students who have reported information in a given field that seems unlikely given information reported elsewhere. Institutions often combine these two strategies by selecting applicants with unlikely combinations of information, but only for some subset of at risk applicants. Below we discuss each strategy in more detail, providing illustrative verification profiles.

The “At-Risk” Strategy

As we discussed in the previous section, the specific ISIR fields used within profiles and across institutions vary tremendously. Institutions use both broad and narrow at-risk filters to select cases for verification. Two of the three most common ISIR fields used in profiles and by institutions (EFC and dependency status) are commonly used as at-risk filters. EFC is often used to restrict selection to those eligible for need-based aid. This very broad filter selects the entire population of people who are initially eligible for need-based assistance and therefore considered most likely to have made an error in filling out their FAFSA. EFC is also used to restrict verification to those eligible for Pell Grants. Dependency status is often used to restrict a verification selection to the appropriate dependency group for another ISIR item in question. For example, only dependent students have parent reports of adjusted gross income. Other ISIR fields are also used to identify potentially problematic cases (e.g., those with multiple family members in college, large families, and estimated tax information).

Exhibit II.1 illustrates at-risk profiles. These are actual institutional profiles taken from the *Verification Edit Profile Setup Reports* submitted by institutions. The names of the profiles were altered to improve descriptions.

**Exhibit II.1:
“At-Risk” Profiles**

EFC based profiles:

NEED BASED AID ELIGIBILITY
(EFC<=39000)

PELL GRANT ELIGIBILITY
(EFC<=3800)

Dependency status profiles:

PARENTS WHO REPORTED UNUSUALLY LOW INCOME
(DEPENDENCY STATUS="D") AND
(COMMENT CODES="16")

INDEPENDENT STUDENTS WITH UNUSUALLY LOW INCOME
(DEPENDENCY STATUS="I") AND
(COMMENT CODES="21")

UNMARRIED INDEPENDENT STUDENTS WITH MORE THAN ONE FAMILY MEMBER
(DEPENDENCY STATUS="I") AND
(STUDENT'S NUMBER OF FAMILY MEMBERS>="01") AND
(STUDENT'S MARITAL STATUS<>"2")

Other “at-risk” profiles:

MORE THAN ONE IN COLLEGE
(STUDENT'S NUMBER IN COLLEGE>="2") AND
(PARENTS' NUMBER IN COLLEGE>="2")

MORE THAN FOUR FAMILY MEMBERS
(PARENTS' NUMBER OF FAMILY MEMBERS>="4")

ESTIMATED TAX RETURNS
(PARENTS' TAX RETURN FILED="2") OR
(STUDENT'S TYPE OF TAX RETURN USED="2")

The “Unlikely” Strategy

In addition to selecting subpopulations with heightened risk for making an error on the FAFSA that could have an impact on aid eligibility, QA institutional verification profiles also target applicants who have submitted two or more pieces of information that are not likely to be all correct. One of the most common examples employed by QA institutions is verifying reports of adjusted gross income and taxes paid that do not seem plausible in light of each other. Adjusted gross income is one of the three most common ISIR fields used by QA Program institutions to select students for verification. For example, an unlikely combination of information would be a parent who reports being widowed but does not list any survivor benefits on Worksheet A. Finally, institutions also check for duplicate amounts (the exact same value) reported in several fields as a likely indication of confusion about FAFSA instructions. Examples of profiles based on the “unlikely information” strategy are provided in Exhibit II.2.

Exhibit II.2: “Unlikely Information” Profiles

Unlikely adjusted gross income (AGI):

PARENTS TAXES GREATER THAN 25 PCT AGI
(DEPENDENCY STATUS="D") AND
(PARENTS' U.S. INCOME TAX PAID>tbl_E_Parent.PARAGI*.25)

INDEPENDENT STUDENT WITH TAXES GREATER THAN 12 PCT AGI
(DEPENDENCY STATUS="I") AND
(STUDENT'S U.S. INCOME TAX PAID>=.12tbl_E_Student.STUDAGI)

DEPENDENT STUDENT WITH INCOME EXCLUSIONS > 20% OF AGI
(DEPENDENCY STATUS="D") AND
(PARENTS' TOTAL FROM WORKSHEET C>tbl_E_Parent.PARAGI *.20)

INDEPEPENT STUDENT WITH INCOME EXCLUSIONS > 20% OF AGI
(DEPENDENCY STATUS="I") AND
(STUDENT'S TOTAL FROM WORKSHEET C>tbl_E_Student.STUDAGI *.20)

Other unlikely mismatches:

WIDOWED AND WORKSHEET A ZERO OR BLANK
(PARENTS' MARITAL STATUS="4") AND
((PARENTS' TOTAL FROM WORKSHEET A="0") OR
(PARENTS' TOTAL FROM WORKSHEET A="BLANK"))

PARENTS AND STUDENT AGI EQUAL TO EACH OTHER
(PARENTS' ADJUSTED GROSS INCOME=tbl_E_Student.STUDAGI) AND
(DEPENDENCY STATUS="D")

Implications for Federal Verification

The verification procedures of QA Program institutions have evolved slowly. They were often created in response to areas identified as problematic in previous analyses. Although we can identify two basic strategies, targeting at-risk groups and looking for unlikely combinations of information in the data being examined, there is a tremendous amount of variation in the way institutions use specific ISIR fields in carrying out their verification procedures. For example, the specific proportion of AGI on which parents or students must pay taxes before the data are flagged ranges from .1 to .5 across QA Program institutions.

A basic feature of the philosophy that drives the approach employed by the Quality Assurance Program is to allow institution officials to develop unique verification solutions for the unique challenges they face with their student body. Hence the practices of QA institutions are tailored to their individual needs, which are based on past experience at these institutions.

Therefore, rather than look at the QA Program for the one most effective practice, FSA should consider ways to incorporate the two basic strategies of QA Program institutions into its modification of federal verification. Which “at-risk” populations warrant “subjective” selection for federal verification? How can models predicting the probability of over-awards be specified to incorporate the insight that the value in one ISIR field needs to be considered in light of the value of information reported in other fields?

III. CAPACITY OF THE QUALITY ANALYSIS TOOL SOFTWARE TO CAPTURE INSTITUTIONAL VERIFICATION PROCEDURES

This section of the report describes limitations that institutions experienced in using the Quality Analysis Tool software and suggests enhancements to the next version of the software.

Limitations Reported by Institutions

As part of this study, QA Program institutions were asked to keep track of the limitations they encountered while using the Quality Analysis Tool software. Institutions were instructed to provide to AIR a list of specific characteristics of their verification practices that they could not accurately or completely enter into the Quality Analysis Tool software.

Out of 136 institutions that provided readable *Verification Edit Profile Setup Reports*, 22 also supplied information on the limitations of the Quality Analysis Tool software. These sets of limitations fall into two broad categories: limitations of the current software version and limitations stemming from user confusion.

Although we will concentrate on the limitation related to the current software version, it is worth noting that 5 institutions out of 22 (or 23 percent) reported limitations stemming from their confusion with the software. These misdiagnosed limitations all dealt with not fully understanding the query functionality of the software. They ranged from not knowing the CPS convention of using 2,000,000,002 for “blank” values, to not understanding how to string together a number of logical conditions using the conjunctions “AND” and “OR.” Although the clarity of instructions, online help, prepared guidance documents, and conference presentations dealing with queries limited the number of institution that experienced these types of issues, the remaining confusion suggests that further improvements can still be made in the training materials to highlight the capabilities of the Quality Analysis Tool software.

The reported software-related limitations from the other 17 institutions fall into one of five categories, presented here in order of the number of times the issue was reported: 1) sum or basic calculations, 2) field-to-field comparison, 3) missing field/s, 4) year-to-year comparison, and 5) other. Table III.1 lists the frequencies with which institutions reported problems in each category. Entries do not sum to 17 because some institutions reported more than one limitation.

A discussion of each category, along with illustrations from the institutions themselves, follows the table.

**Table III.1:
Number and Percentage of QA Program Institutions Reporting
Various Quality Analysis Tool Software-Related Limitations**

	SUM OR BASIC CALCULATIONS	FIELD-TO FIELD COMPARISON	MISSING FIELD/S	YEAR-TO-YEAR COMPARISON	OTHER
NUMBER OF INSTITUTIONS	12	5	3	2	4
PERCENT OF INSTITUTIONS	70.6	29.4	17.6	11.8	23.5

Sum or Basic Calculations

As part of their verification process, many institutions are interested in either summing two values, such as father’s income and mother’s income, or comparing the sum of values to a constant. Over two-thirds of institutions reporting a software-related limitation indicated that the Quality Analysis Tool did not allow them to perform such summations or basic calculations, as illustrated in the words of several QA administrators:

It would be helpful if there were a way to add mother and father wages (dependent undergraduate) and student and spouse wages (married students). As a result our query as submitted only includes unmarried independent students. We’d have to use our own reporting mechanisms to get the complete population.

The query tool does not allow for mathematical calculations. So, for example, if I want to know if the tax paid reported is greater than 25% of AGI, I can’t create a query. We use several calculations in our verification selection criteria. In each case, I had to create a user-defined field that “represents” the calculation but doesn’t actually perform it.

Field-to-Field Comparison

A number of institutions are interested in comparing the value of one field with the value of another to implement their verification procedures. However, as illustrated by several QA institution administrators, this is not possible in the current version of the Quality Analysis Tool:

I created a user database field named “work-study earnings.” I needed to perform a field-to-field comparison to compare this field to the student’s worksheet C but I could not perform a field-to-field comparison.

We were unable to perform [a] query within the Quality Analysis Tool because it doesn’t allow for a field-to-field comparison of household size and exemptions.

Field-to-field comparisons are limited to dollar amounts on the ISIR record itself and exclude non-dollar ISIR and user database fields.

Missing Fields

Several institutions also indicated that they use fields other than the ones made available by the Quality Analysis Tool in implementing their verification procedures. Although fields not on the ISIR cannot be made available “automatically,” those that are on the ISIR can be. An examination of these missing fields suggests that there is little common ground among institutions about the additional fields they would like to see added to the database. Institutions suggested adding the following fields:

- Veteran status
- “True” freshman status
- Combined father and mother earned income from work
- Previous year’s Pell paid to student
- Cost of attendance
- Parents’ total income (taxable and non-taxable)
- Student’s number of *F*s for a term

Year-to-Year Comparison

Several institutions also expressed the need to compare a given field with the information from the same field a year ago. They indicated that some of the previous year’s values are an integral part of their verification process:

We use prior year verification data to resolve current year problems in some cases. For example, if we received documentation of U.S. citizenship in a prior year due to a match problem, we do not request it again in the current year if the student fails the match again. There is no facility to do this in the [Quality Analysis Tool] database.

As far as we could determine there isn't a means to compare last year's dependency data with this year's dependency data.

Other

Several institutions reported limitations that are unique to their situation or verification process and hence are not generalizable or applicable to other institutions. These limitations ranged from being unable to meet certain logical conditions through the Quality Analysis Tool to being in the process of developing a different verification system that would not be compatible with the Quality Analysis Tool. As an administrator noted:

I should warn you that for the next year or the year after, we're considering using a point system whereas each parameter would be assigned a point value and if the sum of a student's points was greater than a certain amount, then that student would be selected. Such a system would not be able to be handled by the current Quality Analysis Tool.

Although it would be impossible to design a Quality Analysis Tool that could accommodate every institutional idiosyncrasy, care should be taken to develop a system that is flexible enough to cover a wide range of operations for end users.

Appraisal of the Current Version's Capacity to Deal With Limitations

The limitations reported by QA Program institutions are largely related to not having a desired piece of information to perform a given query. The Quality Analysis Tool has the capacity to integrate 255 additional data fields into the underlying database of ISIRs through the user database feature. Hence, in theory, users have a great deal of flexibility in adding additional information. However, the process of adding information to the database is cumbersome. Institutions must create the desired fields in the database and then hand-enter or import the data. Even though the import feature is the most practical method for adding information to the database for a sizeable number of aid applicants, the process still requires institutions to write an ASCII computer file following a specific record layout. This imposes a non-trivial burden on financial aid offices, especially those with limited access to technical staff for processing the computer and software utilities necessary to comply with the data record requirements. Therefore, ideally the user database solution should be used only to add data that are not on the ISIR and cannot be generated from information already available.

Limitation That Can Be Addressed Only Through the User Database

Data that cannot be derived from ISIR information need to continue to be brought in via a user database import. There is simply no other way to make this information available. Given that creating a user database can be a daunting task for a short-staffed aid office, the QA Program may need to consider providing additional guidance in this area. An activity guide explaining the required record layout and providing detailed illustrations on how to import “outside” information may make it easier for institutions to use this feature of the Quality Analysis Tool.

Limitations That Can Be Resolved Through Software Modifications

The next version of the Quality Analysis Tool software would benefit from adding the capacity to compute additional fields by applying a simple mathematical formula including multiple ISIR fields. The verification practices of the QA institutions that look for unlikely combinations of FAFSA information often involve comparing a total (e.g., adjusted gross income) with the sum of its components (e.g., wages of spouses).

The field-to-field comparison capacity added to the query functionality last year has been very useful. Expanding the number of fields available to institutions when making such comparisons would address an area of need identified by institutions participating in the QA Program. If possible, this expansion of the fields available for comparison should include user database fields and the results of calculations performed on other ISIR fields.

Although only two institutions identified the lack of the previous year’s ISIR information as a limitation, it might still be worth pursuing the option of providing institutions with a means of importing data from previous year’s ISIRs or from the database of prior versions of the Quality Analysis Tool.

Implications for the Next Version of the Quality Analysis Tool software

The analysis of reported limitations suggests several areas in which the Quality Analysis Tool software can be improved. First, although many of the limitations related to “missing” information can be addressed only by the existing user database, providing additional assistance to institutions in using this feature of the QA Tool will increase its usefulness.

The most common limitations identified by institutions can be addressed by adding a “compute” function to the QA Tool. Institutions could create new fields by applying basic mathematical formulas to existing ISIR fields (e.g., add, subtract, divide, multiply) and having all database elements available in the “compare fields” query interface. The new field-to-field functionality in the query interface was appreciated by participating institutions and prompted the second most common request: expanding this functionality to additional fields. The computation functionality might have to be external to the query interface to allow field-to-field comparisons with resulting values.

Although only a few institutions raised the issue of the availability of the previous year’s data, equally important is the issue of the availability of the previous year’s queries and verification profiles. Because institutions were entering verification information for the first time in spring 2002, the issue of duplicating this effort has not yet arisen. However, this information will need to be transferred to the next version of the Tool. Asking institutions to reenter this information from scratch each year and to redo the same, at times labor-intensive task (one institution had more than 90 verification profiles) seems problematic. Institutions will likely be turned off by the need to repeat these time-consuming procedures each year they use the QA Tool. Although adding this feature might pose a substantial programming challenge because field names change and other cross-version issues arise, the Tool will benefit from automating the transfer of year-to-year queries and verification profile information.

IV. CONCLUSION

This report examines the procedures used by the Quality Assurance Program institutions in selecting students for verification of accuracy in awarding Title IV funds. The results are based on data submitted by 136 participating institutions (out of 144 total QA institutions) (see Executive Summary) during spring 2002. Specifically, the report consists of two main sections: one describing the institutional verification practices of the QA Program institutions and another examining the capacity of the Quality Analysis Tool software to capture various institutional verification procedures. Below, we summarize key findings and recommend ways to improve the Quality Analysis Tool.

Summary of Key Findings

In describing the verification practices of QA Program institutions, we examined the makeup of their verification profiles in terms of their use of 22 key ISIR fields and an “other” category, focusing on two distinct levels of analysis: the verification profiles themselves and the practices used by the institutions as a whole. These separate analyses were necessary because of variation in how institutions create verification profiles within the Quality Analysis Tool. Because they have the option of using one or more queries to define a single verification profile, some institutions define all their verification procedures in a single profile, whereas others use many profiles—one for each logical condition.

- The results show little commonality across the 974 profiles used by QA institutions in the fields used for verification. Of the 22 individual fields examined (excluding the “other” category), only one, “dependency status,” is used in more than 50 percent of verification profiles. Further, most institutions defined their verification profiles relatively narrowly. Approximately one-quarter (24 percent) of all verification profiles use only one field to flag applicants for verification and almost half (46 percent) use no more than two fields. Overall, 93 percent of institutional profiles rely on five or fewer fields in their verification queries to flag applicants.
- Not surprisingly, the percentages are higher when looking at counts at the institution level, yet the three most commonly used fields are identical to results at the profile level, namely, “dependency status” (59 percent), “parents’ adjusted gross income” (56 percent), and “expected family contribution” (54 percent). Only two additional fields are used by at least 40 percent of institutions: “student’s adjusted gross income” and “parents’ filed tax return.”

- The results also reflect substantial variation in the verification practices of Quality Assurance Program institutions. Slightly more than half of all QA Program institutions (52 percent) use six or fewer fields in their verification procedures, and one institution in eight (12.5 percent) uses only a single field in flagging applicants for verification. Most of the single field institutions are new to the Quality Assurance Program and are following federally prescribed verification during 2002–2003.
- QA Program institutions follow basically two strategies in their use of ISIR fields to select applicants for verification. The first strategy is to select some subset of students believed to be “at-risk” for error. The second method is to select students who have reported information in a given field that seems unlikely given information reported elsewhere. These two strategies are often combined, selecting applicants with unlikely combinations of information, but only for some subset of “at-risk” applicants.
- Of 136 institutions that provided readable *Verification Edit Profile Setup Reports*, 22 also supplied information on the limitations they experienced with the Quality Analysis Tool software. The limitations fall into one of five categories, presented here in order of the number of times they are reported: 1) sum or basic calculations, 2) field-to-field comparison, 3) missing field/s, 4) year-to-year comparison, and 5) other.
- As part of their verification process, many institutions are interested in either summing two values, such as father’s income and mother’s income, or comparing the sum of values to a constant. A number of institutions are interested in comparing the value of one field with the value of another to implement their verification procedures. Several institutions also indicated that they use fields other than the ones made available by the Quality Analysis Tool in implementing their verification procedures. Other institutions also expressed the need to compare a given field with information from the same field a year ago. Finally, several institutions reported limitations that are unique to their situation or verification process and hence are not generalizable or applicable to other institutions.

Summary of Recommendations

- The way institutions use specific ISIR fields in carrying out their verification procedures varies greatly. Therefore, rather than look at the QA Program for the one most effective practice, FSA should consider ways to incorporate the two basic strategies of QA Program institutions into its modification of federal verification. Which “at-risk” populations warrant subjective selection for federal verification? How can models predicting the probability of over-awards be specified to incorporate the insight that the value in one ISIR field needs to be considered in light of information reported in other fields? Once paid-on data are collected for award year 2002-2003, the combination of these two strategies will enable institutions to quickly and effectively detect individuals who are most likely to be receiving over-awards.
- In terms of recommendations related to the software used, the analysis of reported limitations suggests several areas in which the Quality Analysis Tool software can be enhanced. First, the procedures to add user-defined information to the Quality Analysis

Tool software can be further emphasized and will benefit from additional illustrations and training and tutorial materials.

- Second, adding computational functionality to the Quality Analysis Tool software will go a long way toward addressing many of the limitations experienced by participating institutions. Institutions should be able to create new fields by applying basic mathematical formulas to existing ISIR fields (e.g., add, subtract). The new field-to-field functionality in the query interface was appreciated by participating institutions and prompted the second most common request: expanding this functionality to additional fields.
- Finally, the Tool will become much more user-friendly if it has the capability to automate the transfer of year-to-year queries. This will serve to reduce the burden on institutions, eliminating the need to reenter verification information into the 2003-2004 and subsequent versions of the QA Tool. Because institutions were entering verification information for the first time in spring 2002, this issue has not yet arisen.