

**Memorandum**

Date . **JAN 14 2000**

From Deputy Inspector General  
for Audit Services

Subject Review of the National Institutes of Health National Research Service Awards Program  
and Payback Requirements (CIN: A-15-99-80002)

To Anthony L. Itteilag  
Deputy Director for Management  
National Institutes of Health

Attached is our final report entitled "Review of the National Institutes of Health (NIH) National Research Service Awards (NRSA) Program and Payback Requirements." The objective of our review was to determine whether NIH adequately monitors NRSA recipients to ensure they fulfill their service or financial payback obligations.

In a memorandum dated December 27, 1999, NIH forwarded its comments on our findings and recommendations contained in our draft report.

Within the next 60 days, we would appreciate your views and the status of any further action taken or contemplated on our recommendations. If you have any questions, please call me or have your staff contact Joseph J. Green, Assistant Inspector General for Public Health Service Audits, at (301) 443-3582.

To facilitate identification, please refer to Common Identification Number A-15-99-80002 in all correspondence relating to this report.

  
Thomas D. Roslewicz

Attachment

**Department of Health and Human Services**

**OFFICE OF  
INSPECTOR GENERAL**

**REVIEW OF THE NATIONAL  
INSTITUTES OF HEALTH NATIONAL  
RESEARCH SERVICE AWARDS  
PROGRAM AND PAYBACK  
REQUIREMENTS**



**JUNE GIBBS BROWN  
Inspector General  
JANUARY 2000  
A-15-99-80002**

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Deputy Inspector General  
for Audit Services

Subject

Review of the National Institutes of Health National Research Service Awards Program  
and Payback Requirements (CIN: A-15-99-80002)

To

Anthony L. Itteilag  
Deputy Director for Management  
National Institutes of Health

This final report provides you with the results of the Office of Inspector General's review of the National Institutes of Health (NIH) National Research Service Awards (NRSA) Program and Payback Requirements.

**OBJECTIVE**

The objective of our review was to determine whether NIH adequately monitors NRSA recipients to ensure they fulfill their service or financial payback obligations.

**SUMMARY OF FINDINGS**

Our review showed that NIH has not maintained a complete and accurate payback file (data base) to adequately monitor its NRSA recipients. Several factors contributed to the problems with this data base. Most significantly, NIH components did not always follow established policies and procedures for maintaining the data base and NIH's automated system did not always perform the functions needed to update the data base when new information was entered. As a result, NIH could not readily verify the current payback status for over 4,100 NRSA recipients, or the financial debts<sup>1</sup> they potentially owe the Government. After we brought these matters to NIH officials' attention, they formed a "Payback Workgroup" and began work to identify the extent of the problems and the necessary corrective actions.

To assist with efforts to correct the problems with the data base, we recommend that NIH:

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<sup>1</sup> The financial debt for NRSA recipients (trainees and fellows) sponsored by domestic nonfederal institutions includes stipends only and applicable interest. Whereas, the debt for NRSA recipients (fellows only) sponsored by Federal or foreign institutions includes stipends, other support (e.g., travel costs), and applicable interest.

1. review all NRSA recipients that have new, open, or delinquent payback records to determine whether their status is properly and consistently recorded in the payback data base;
2. review a sample of NRSA recipients that have closed payback records<sup>2</sup> to determine whether their status is accurately and properly recorded in the payback data base. If the sample of NRSA recipients discloses that a significant number of payback records was inaccurately and improperly closed, we further recommend NIH to consider reviewing all the NRSA recipients that have closed payback records;
3. establish computer records within the payback data base for all NRSA recipients obligated for service or financial payback;
4. update the payback data base in a timely manner to reflect the NRSA recipients' current payback status;
5. verify periodically that the computer records within the payback data base are consistent with the paper files retained for NRSA recipients;
6. reconcile periodically the NRSA recipients obligated for financial payback to the Office of Financial Management's accounts receivable;
7. utilize available monthly NRSA Payback Reports to ensure the data base is accurately maintained; and
8. review the automated information system to determine what improvements are needed to properly update the payback data base when information is entered.

Additionally, NIH has several components that share the responsibility for maintaining the NRSA payback data base. To ensure that proper maintenance of the data base is a top priority, we suggest NIH consider centralizing the function so that a single unit would have responsibility for maintaining the data base and ultimately ensuring that NRSA recipients fulfill their payback requirements.

In its written comments to our draft report, NIH concurred with all of our recommendations. The complete text of NIH's response is presented in the Appendix of this report.

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<sup>2</sup> The closed payback records are those where the NRSA recipients have either fulfilled payback, received a waiver, or were granted regulatory dismissal of the payback obligation.

## BACKGROUND

The NIH, within the Department of Health and Human Services (HHS), is the world's largest biomedical and behavioral research institution and is the lead Federal agency responsible for basic and clinical research and research training. In 1974, Congress authorized NIH to establish the NRSA program to help ensure the availability of highly trained scientists to carry out the Nation's biomedical and behavioral research agenda. The NRSA program supports predoctoral<sup>3</sup> and postdoctoral<sup>4</sup> research training<sup>5</sup> through a system of institutional training grants and individual fellowships. According to NIH, between 1974 and 1998, approximately 150,000 individuals received NRSA financial support; and of these, approximately 97,000 incurred service payback obligations. These individuals were awarded grants and fellowships by 20 of NIH's institutes.

The NRSA legislation requires some<sup>6</sup> recipients of support to pay back the Federal Government by engaging in health-related biomedical or behavioral research, teaching, or any combination of these activities. Although the portion of trainee support which obligates the individual to service payback has changed since the inception of the program, the recipient must undertake such service continuously within 2 years after termination of the NRSA support. If any of the recipients to whom the requirement for service is applicable fail to undertake or perform such service, the United States Government will be entitled to recover financial debts from the recipient. The NRSA recipient is required to complete financial payback within 3 years of the date the debt is due to the Government.

Several NIH components share the responsibility of ensuring the NRSA recipients fulfill their service or financial payback obligations. Each awarding institute is generally responsible for ensuring the NRSA recipients it has supported perform the required service. However, several institutes have made arrangements for the NRSA Payback Service Center (NRSA PSC), which began operating on October 1, 1995,

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<sup>3</sup> Pre-doctoral research training is provided to individuals who have a baccalaureate degree and are enrolled in a doctoral program leading to either a Ph.D., a comparable research doctoral degree, or the combined M.D./Ph.D.

<sup>4</sup> Postdoctoral research training is provided to individuals who have received a Ph.D., an M.D., or comparable doctoral degree from an accredited domestic or foreign institution.

<sup>5</sup> By law NRSA predoctoral recipients can receive up to 5 years of support and postdoctoral recipients can receive up to 3 years of support under the NRSA program without a waiver from the awarding component. This NRSA support can be awarded through either a training grant or a fellowship.

<sup>6</sup> According to Section IV(B)(3) of the NRSA Guidelines, NIH Revitalization Act established that effective June 10, 1993, predoctoral recipients would no longer incur a payback obligation whereas postdoctoral recipients would incur a payback obligation for the first 12 months of the NRSA support.

within the National Institute of General Medical Sciences, to determine whether recipients perform the required service. The institutes and the NRSA PSC are required to refer the recipients who do not perform their required service to the Office of Financial Management (OFM) within NIH. The OFM is responsible for collecting the financial debts owed by such recipients. In addition, OFM contracts with the Program Support Center, within the Office of Secretary of HHS, to collect the financial debts on accounts delinquent over 180 days.

From appointment of the training award to completion of the payback, NIH requires NRSA recipients to submit several forms from which data is extracted. The NIH stores this data relating to NRSA support and payback within its centralized computer system called Information for Management, Planning, Analysis, and Coordination (IMPAC). The IMPAC system allows NIH to generate various reports based on the data to monitor the recipients' fulfillment of their payback requirement. The NIH's Data Management and Control Section (DMCS) is responsible for the integrity of the data retained in the IMPAC system. However, DMCS relies on the institutes or NRSA PSC to input data and verify that the data are complete and accurate. The institutes and NRSA PSC also retain the forms supporting the data stored within its IMPAC system for 1 year following payback completion.

### **OBJECTIVE, SCOPE, AND METHODOLOGY**

Our review was conducted in accordance with generally accepted government auditing standards for performance audits. The primary purpose of our review was to determine whether NIH adequately monitors NRSA recipients to ensure they fulfill their service or financial payback obligations. We conducted our field work at NIH offices in Rockville and Bethesda, Maryland. The field work was performed from January to July 1999.

To identify the existing controls, we reviewed NIH's policies and procedures for maintaining the NRSA payback data base. We also reviewed information on the IMPAC system used to track the extramural research activities. We held discussions with NIH officials from the Office of Extramural Research (OER), DMCS, NRSA PSC, and OFM. We also interviewed representatives of the following five NIH institutes: (1) National Institute of General Medical Sciences; (2) National Heart, Lung, and Blood Institute; (3) National Institute of Mental Health; (4) National Institute of Diabetes and Digestive and Kidney Diseases; and (5) National Cancer Institute.

To examine the controls, we reviewed various reports available monthly, or as needed, from the IMPAC system. We obtained from each institute the NRSA Payback Report No. 15, which listed the recipients that should have been in financial collection as of February 5, 1999. The report identified NRSA recipients recorded in financial

collection from 1983 to 1999. We compared this report with the Accounts Receivable (A/R) Report, dated March 11, 1999, prepared independently by OFM.

We contacted NIH officials on March 23, 1999, to inform them of problems we found with 635 recipients listed in their payback data base and 93 recipients that should have been, but were not. We noted these problems through our comparison of the two reports mentioned above. We requested NIH to review these problem cases and provide information regarding their resolution. We then met with NIH officials on May 4, 1999, to discuss the results of their review.

Subsequently, we obtained data from NIH that identified 3,383 NRSA recipients in its payback data base, for whom NIH was uncertain of their current payback status. These recipients, for whom NRSA support ended in 1976 through 1997, were listed in the data base as delinquent in fulfilling their service payback and potentially owing financial debts to the Government. We determined that these recipients were included in a report titled "NRSA Records Pending ICD<sup>7</sup> Action" provided to the institutes on a monthly basis by DMCS. We requested NIH to conduct a review of these recipients and determine their current payback status. The NIH had not completed its review at the time we ended our field work. At a later date, we plan to conduct a follow-up review of NIH's results.

It was not practical for us to determine the amount of financial support received by the 4,100 NRSA recipients identified in our review or the financial debts they potentially owed the Government. The amount of each trainee's grant was dependent upon whether the trainee was a predoctoral or a postdoctoral recipient, and if postdoctoral, the amount of experience the trainee had. Between 1974 and 1998, stipends for predoctoral recipients ranged from \$3,900 to \$11,748 whereas stipends for postdoctoral recipients ranged from \$10,000 to \$33,012. Specific information relating to amounts granted to the 4,100 recipients was not readily accessible for our analysis.

## **RESULTS OF REVIEW**

Our review showed that NIH has not maintained a complete and accurate payback data base to adequately monitor its NRSA recipients. Several factors contributed to the problems with this data base. Most significantly, NIH components did not always follow established policies and procedures for maintaining the data base and NIH's automated system, IMPAC, did not always perform the functions needed to update the data base when new information was entered. As a result, NIH could not readily verify the current payback status for over 4,100 NRSA recipients, or the financial debts they potentially owe the Government. According to NIH, the 4,100 recipients

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<sup>7</sup> ICD is the abbreviation for Institutes/Centers/Divisions.

represent about four percent of the individuals that incurred service payback obligations between 1974 and 1998.

**The NIH Has Specific Controls for Maintaining  
A Complete and Accurate NRSA Payback Data Base**

The NIH has specific controls for maintaining a complete and accurate payback data base for NRSA recipients. The objective of these controls is to assure management that it is getting complete and accurate information about the status of the recipients, and ultimately, whether the payback program is operating properly. These controls include policies and procedures that management has implemented to reasonably ensure complete and accurate data is obtained, maintained, and fairly disclosed in reports.

The NIH Manual 4810 - Section 3 (H)(1)(b) requires the institutes to establish a computer record within the IMPAC system for each NRSA recipient to track financial support. If a recipient is obligated for payback following termination of the NRSA support, the institutes are required to create another record in the NRSA payback data base. The institutes or designated NRSA PSC are required to maintain this record until the recipient fulfills payback.

The NRSA Payback Manual - Section 14 requires the institutes to establish paper files for each NRSA recipient. These files should contain pertinent information needed for payback. The institutes or NRSA PSC are required to verify that the information agrees with the computer records. If discrepancies are found in the records, the institutes or NRSA PSC are required to update the records either by entering the correct information directly or sending a Change Notice to the appropriate official.

Section 18 of the NRSA Payback Manual requires DMCS to generate several reports. Some of these reports are generated on a monthly basis. Most require no action and are kept primarily as a reference to assist the institutes or NRSA PSC in monitoring the recipients' payback activities. However, the institutes or NRSA PSC are required to take action upon receipt of the following three reports: (1) "Fellows/Trainees Who Have Not Responded to Mailing of Follow-up Annual Payback Activities Certifications;" (2) "Terminated NRSA Recipients Who Have Not Begun Payback;" and (3) "NRSA Records Pending ICD Action."

**The NRSA Payback Data Base Is Not Complete and Accurate**

Contrary to established policies and procedures, NIH has not maintained a complete and accurate payback data base to adequately monitor its NRSA recipients. With the



assistance of NIH staff, we identified problems with over 4,100<sup>8</sup> NRSA recipients contained in the data base. Specifically, the payback data base:

- listed 635 recipients for financial collection, many of whom had satisfied their payback obligations;
- did not list 93 recipients who were at OFM for financial collection; and
- listed 3,383 recipients as delinquent in fulfilling their service payback, although 454 of them were not delinquent.

The problems found with NRSA payback data base are discussed further below.

The NRSA Payback Data Base Listed 635 Recipients For Financial Collection. Many Of Whom Had Satisfied Their Payback Obligations

The payback data base listed 635 recipients in financial collection, many of whom had satisfied their payback obligations. For the problem identified, NIH provided the following explanations:

- 360 recipients had fulfilled their payback through service or financially. The payback data base had not been updated to reflect this.
- 150 recipients had been referred to OFM for financial collection. The OFM did not have these referrals on its A/R report. Also, neither the institutes nor NRSA PSC had knowledge of their current payback status.
- 44 recipients may have fulfilled their payback, but that cannot be determined. The recipients received NRSA support prior to 1988 and paper files were not available for verification.
- 41 recipients' records had been closed for various reasons (e.g., service payback dismissed due to legislative allowance<sup>9</sup>). The payback data base had not been updated to reflect this.

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<sup>8</sup> Not all of the NRSA recipients represented by this number will have outstanding payback obligations. We were not able to perform the testing needed to confirm the actual number of recipients.

<sup>9</sup> Legislative allowance, resulting from an amendment to the NRSA Act by the Omnibus Reconciliation Act of 1981, eliminates 12 months of the payback obligation for all NRSA awards made on or after August 13, 1981. This provision was eliminated by the NIH Revitalization Act of 1993, which reduced the obligated support to the first 12 months of postdoctoral research training, beginning on June 10, 1993.

- 19 recipients owed financial debts to the Government. Based on additional information NIH provided, 18 of these recipients were referred to OFM for financial collection. However, it appears these referrals were made after our review of OFM's A/R report, dated March 11, 1999.
- 9 recipients' debts had been written off as uncollectible. The payback data base had not been updated to reflect this.
- 7 recipients had been involved in service payback. The payback data base had not been updated to reflect this.
- 3 recipients' debts had been waived.<sup>10</sup> The payback data base had not been updated to reflect this.
- 2 recipients had received NRSA support from multiple institutes. The payback data base had not been updated to reflect this. Also, these recipients had not been referred to OFM for financial collection.

The NRSA Payback Data Base Did Not List 93 Recipients Who Had Been Referred to OFM for Financial Collection

The payback data base did not list 93 recipients who had been referred to OFM for financial collection. The NIH did not provide an explanation as to why these recipients' records had not been established within the payback data base. However, we noted 29 of the 93 recipients were subsequently added to the data base.

The NRSA Payback Data Base Listed 3,383 Recipients As Delinquent, Although 454 Of Them Were Not Delinquent

The payback data base listed 3,383 recipients as delinquent in fulfilling their service payback, although 454 of them were not delinquent. These recipients were listed as delinquent because the payback data base indicated they had not begun their service within the required 2 years. The NIH discovered a system problem with IMPAC whereby the payback data base did not reflect that the 454 recipients had indeed begun service. The NIH indicated further investigation of the remaining 2,929 recipients is warranted to determine their correct payback status.

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<sup>10</sup> As required by law, NIH waives, in whole or in part, the payback obligation whereby it is determined that compliance by the NRSA recipients is impossible; would impose substantial hardship; or enforcement of the obligation would be against equity and good conscience.

### **The NIH Did Not Always Follow Policies and Procedures Established to Maintain the NRSA Payback Data Base**

In our review, we found that several factors contributed to the problems with the NRSA payback data base. Specifically, NIH components did not always: establish the required computer records for all NRSA recipients obligated for payback; update the data base to reflect the NRSA recipients' current payback status in a timely manner; verify the computer records with the paper files established for the NRSA recipients; and utilize available monthly reports to identify and resolve problems within its data base. Additionally, NIH was unaware that its automated system did not always update the data base when new information was entered.

### **The NIH Could Not Readily Verify the Current Payback Status for Over 4,100 NRSA Recipients**

At the time of our review, NIH could not readily verify the current payback status for over 4,100 NRSA recipients. Therefore, NIH does not know the full extent of the financial debts these recipients potentially owe the Government. Since some of these recipients received NRSA support over 10 years ago, NIH may be at risk of not obtaining either the service or financial debts owed. Furthermore, NIH has no assurance that the payback data base contains all the NRSA recipients obligated for payback or their current payback status. As noted on page 5, it was not practical for us to determine the amount of financial support received by the 4,100 NRSA recipients or the financial debts they potentially owed the Government.

## **RECOMMENDATIONS**

To assist with efforts to correct the problems with the data base, we recommend that NIH:

1. review all NRSA recipients that have new, open, or delinquent payback records to determine whether their status is properly and consistently recorded in the payback data base;
2. review a sample of NRSA recipients that have closed payback records to determine whether their status is accurately and properly recorded in the payback data base. If the sample of NRSA recipients discloses that a significant number of payback records were inaccurately and improperly closed, we further recommend NIH to consider reviewing all the NRSA recipients that have closed payback records;
3. establish computer records within the payback data base for all NRSA recipients' obligated for service or financial payback;

4. update the payback data base in a timely manner to reflect the NRSA recipients current payback status;
5. verify periodically that the computer records within the payback data base are consistent with the paper files retained for NRSA recipients;
6. reconcile periodically the NRSA recipients obligated for financial payback to OFM's account receivables;
7. utilize available monthly NRSA Payback Reports to ensure the data base is accurately maintained; and
8. review the automated information system to determine what improvements are needed to properly update the payback data base when information is entered.

#### **OTHER CONSIDERATIONS**

Currently, NIH has several components that share the responsibility for maintaining the NRSA payback data base. In order for NIH to maintain a complete and accurate payback data base, senior NIH management must ensure that proper maintenance of the data base is a top priority. To ensure that the function is a top priority and is performed efficiently, NIH may want to consider centralizing the function so that a single unit would have responsibility for maintaining the data base and ultimately ensuring that NRSA recipients fulfill their payback requirements.

#### **ACTION TAKEN BY NIH OFFICIALS**

The NIH informed us it is taking action to review its payback data base and determine the current payback status for the NRSA recipients discussed in this memorandum. To facilitate its action, NIH has formed a Payback Workgroup of 14 individuals representing the Office of Management Assessment, OER, OFM, NRSA PSC, and five institutes. The NIH has informed us that it plans to:

- ▶ survey a sample of 20 percent of the 2,929 NRSA recipients recorded as delinquent in fulfilling their service payback;<sup>11</sup>
- ▶ monitor discrepancies and delinquent cases on an ongoing basis;

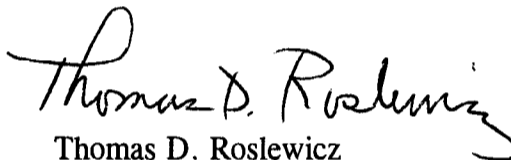
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<sup>11</sup> The NIH officials informed us that, based on the results of their survey, the entire monitoring of all NRSA recipients obligated for payback may be delegated to the NRSA PSC.

- ▶ distribute a monthly delinquency report to encourage the institutes to resolve the delinquent cases or refer them to OFM for financial collections;
- ▶ circulate a quarterly report identifying the recipients in financial collection at OFM;
- ▶ compare the NRSA payback data base to OFM's accounts receivable;
- ▶ create a new code to close the records established prior to 1988, where no paper files were available;
- ▶ provide additional training to staff involved in monitoring the NRSA recipients; and
- ▶ complete implementation of the new IMPAC II system.

#### NIH COMMENTS

On December 27, 1999, NIH responded to our draft report. The NIH concurred with all of our recommendations. The NIH also noted it is planning to centralize under a single unit the responsibility for ensuring that NRSA recipients fulfill their payback requirements. The NIH's comments are included in the Appendix of this report.

  
Thomas D. Roslewicz

# APPENDIX



DEC 27 1999

**TO:** Mr. Joseph J. Green  
Assistant Inspector General  
for Public Health Service Audits

**FROM:** Deputy Director for Management

**SUBJECT:** Written Comments Relating to the Recommendations in the Draft Report "*Review of the National Institutes of Health National Research Service Awards Program and Payback Requirements*" (CIN: A-15-99-80002)

This memorandum provides written comments relating to the recommendations in the subject draft report.

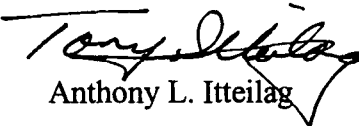
NIH concurs with the OIG recommendations to:

- 1) review all NRSA recipients that have new, open, or delinquent payback records to determine whether their status is properly and consistently recorded in the payback data base;
- 2) review a sample of NRSA recipients that have closed payback records to determine whether their status is accurately and properly recorded in the payback database. If the sample of NRSA recipients discloses that a significant number of payback records was inaccurately and improperly closed, we further recommend NIH to consider reviewing all the NRSA recipients that have closed payback records;
- 3) establish computer records within the payback database for all NRSA recipients obligated for service or financial payback;
- 4) update the payback database in a timely manner to reflect the NRSA recipients' current payback status;
- 5) verify periodically that the computer records within the payback database are consistent with the paper files retained for NRSA recipients;
- 6) reconcile periodically the NRSA recipients obligated for financial payback to the Office of Financial Management's accounts receivable;
- 7) utilize available monthly NRSA Payback Reports to ensure the database is accurately maintained; and

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8) review the automated information system to determine what improvements are needed to properly update the payback database when information is entered.

Additionally, the NIH is planning to centralize under a single unit the responsibility for ensuring that NRSA recipients fulfill their payback requirements.



Anthony L. Itteilag