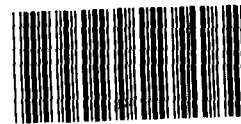


January 1993

HEALTH INFORMATION  
SYSTEMS

National Practitioner  
Data Bank Continues  
to Experience  
Problems



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United States  
General Accounting Office  
Washington, D.C. 20548

**Information Management and  
Technology Division**

B-247712

January 29, 1993

The Honorable Donna E. Shalala  
The Secretary of Health and  
Human Services

Dear Madam Secretary:

This report discusses the Department's National Practitioner Data Bank. We performed this review because of continuing concerns about management of the data bank. We are making recommendations to you aimed at improving the timeliness and security of data bank operations, agency monitoring of the data bank contractor, and agency planning for the data bank's future direction and financing.

As you know, the head of a federal agency is required by 31 U.S.C. 720 to submit a written statement on actions taken on our recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of this letter, and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of this letter.

We are sending copies of this report to the Chairmen of the House and Senate Committees on Appropriations; the Director, Office of Management and Budget; and interested congressional committees. We will also make copies available to others upon request.

Please contact me at (202) 512-6408 if you have any questions concerning this report. The major contributors to this report are listed in appendix II.

Sincerely yours,

Frank W. Reilly  
Director  
Human Resources Information Systems

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# Executive Summary

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## Purpose

The Department of Health and Human Services' (HHS) National Practitioner Data Bank was created to help prevent unethical or incompetent health care practitioners from moving from state to state without disclosure or discovery of their previous damaging or incompetent performance. Shortly before this data bank opened in September 1990, GAO reported on HHS' difficulties in developing the project.<sup>1</sup> Since then, interested parties such as hospitals and physicians have expressed concerns over the data bank's timeliness in responding to requests for information, the security of data, and increasing user fees. Due to these concerns and to follow up on the issues raised in its prior report, GAO initiated a review to determine whether HHS is (1) ensuring the data bank accepts data and responds to user requests in a timely and secure manner, (2) adequately monitoring contractor operations of the data bank's automated system, and (3) adequately planning for the future direction and financing of the data bank.

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## Background

The Health Care Quality Improvement Act of 1986, as amended, authorized the Secretary of HHS to establish a data bank containing information on adverse actions taken against the license, clinical privileges, or professional society memberships of health care practitioners, such as physicians or dentists. The data bank also contains information on malpractice payments resulting from judgments or settlements. Hospitals, group medical practices, professional societies, state licensing boards, and practitioners have access to data bank information. The act requires hospitals to query the data bank whenever they are (1) considering hiring or granting clinical privileges to a health care practitioner or (2) conducting reviews of health care practitioners, which occur every 2 years. In December 1988, HHS contracted with a component of the Unisys Corporation, later incorporated under the name Paramax Systems Corporation, to develop and operate the current data bank. HHS charges users a fee of \$6 for each query to recover transaction processing costs.

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## Results in Brief

HHS' management of the data bank has allowed weaknesses that undermine achievement of a timely, secure, and cost-efficient operation. The data bank usually does not provide users with responses to their queries for several weeks, which in turn delays the granting of privileges to health care practitioners. Further, due to insufficient internal controls, user organizations have, on occasion, received sensitive practitioner data

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<sup>1</sup>Information System: National Health Practitioner Data Bank Has Not Been Well Managed (GAO/IMTEC-90-68, Aug. 21, 1990).

to which they were not entitled. In addition, HHS has inadequately monitored the data bank contractor, which has allowed known automated system problems to persist. Finally, while HHS plans to redesign the data bank, its plans have not incorporated a sound system development approach and are based on funding uncertainties. As a result, HHS may acquire a system that does not address users' needs.

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## Principal Findings

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### Data Bank's Timeliness and Security Problems Continue

Although HHS has taken steps to improve the processing of transactions, the data bank's responses to queries continue to be slow—users generally do not receive responses to their queries for several weeks. As a result, users may not be able to use the information to help them in decisions regarding health care practitioners. For instance, about one-fifth of surveyed hospitals stated they do not receive query responses before making decisions on granting privileges to practitioners. These response delays are due primarily to (1) a reliance on paper documents for submitting queries rather than using more efficient methods, such as telecommunications, which could process queries immediately; (2) the frequent absence of social security numbers on reports and queries; and (3) software deficiencies that cause premature termination of processing.

The data bank's processes for handling query responses also do not provide necessary security for sensitive data on practitioners. Since the information in specific malpractice and adverse action reports is considered sensitive, the 1986 act prohibits the release of this information to unauthorized parties. However, because of insufficient internal controls, the data bank has mailed some query responses to the wrong addresses. GAO identified six such cases in which user organizations, such as hospitals, told the data bank that they had received sensitive practitioner data to which they were not entitled.

### HHS Is Not Adequately Monitoring Data Bank's Automated System

HHS has not used available contractor or internal staff resources to monitor the contractor's operation of the automated system. This has allowed the contractor to forego correcting known system deficiencies. For instance, while a separate technical assistance contractor was used for special studies and system development activities, it was not used to monitor automated system operations. In addition, HHS' computer specialist did not

perform any site visits during 1991 or the first 8 months of 1992 that focused on monitoring the automated system. As a result, system processing deficiencies continue, system documentation is inaccurate, and proposed changes have not been thoroughly reviewed.

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### HHS Has Not Adequately Planned for the Future Direction and Financing of the System

HHS has initiated efforts to redesign the data bank's current inefficient automated system, but these plans are flawed. The timing and sequence of development tasks have not adhered to generally accepted system development principles and user needs have not been adequately considered. As a result, HHS may develop an inefficient system that does not eliminate existing deficiencies.

Delays in developing an improved system could also occur because HHS' funding approach for the project is based on an uncertain premise. Although HHS plans to pay for system development with user fees, it does not have specific authority to do so. Therefore, HHS may need to delay awarding a contract for new system development until it obtains such authority.

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## Recommendations

GAO recommends that the Secretary direct the Administrator of the Health Resources and Services Administration to improve the timeliness and security of data bank operations. GAO also recommends that the Secretary direct the Administrator to perform routine on-site monitoring of the contractor's operation of the automated system, including reviewing the contractor's implementation of corrective actions. In addition, GAO recommends that the Secretary (1) direct the Deputy Assistant Secretary of the Office of Information Resources Management to provide independent technical oversight of the HHS organization responsible for developing the new automated system, to ensure that it follows sound system development life-cycle practices; and (2) not award a contract for the development of a new automated system until ensuring that user needs have been adequately identified, requirements have been fully defined, and alternatives have been assessed. GAO is making other recommendations to improve management of the data bank. Details on these recommendations are contained in chapters 2, 3, and 4.

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## Agency Comments

In commenting on a draft of this report, HHS agreed with most of GAO's recommendations. HHS stated that it has initiated corrections in several areas, including improving the processes for handling query responses,

increasing oversight of the contractor's operation of the automated system, and providing oversight of the development of a new automated system. HHS did not indicate whether it would implement GAO's recommendations to encourage greater use of social security numbers on reports and queries, and to obtain funding authority for the development of the new automated system. GAO continues to believe that such actions are necessary to improve the timeliness of query processing and to eliminate funding uncertainty. HHS also requested that GAO acknowledge the improvements made in data bank operations since GAO's 1990 report. GAO recognizes in chapter 1 HHS' actions taken in response to the prior report and identifies in chapter 2 processing improvements made since the data bank opened.

Chapters 2, 3, and 4 provide additional details on HHS' comments and GAO's evaluation of these comments. In addition, HHS' written comments are reprinted in appendix I.

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**Abbreviations**

GAO	General Accounting Office
HHS	Department of Health and Human Services
IMTEC	Information Management and Technology Division
SSN	social security number

# Introduction

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The Health Care Quality Improvement Act of 1986 (P.L. 99-660), as amended, authorized the Secretary of the Department of Health and Human Services (HHS) to establish a data bank system to help ensure that unethical or incompetent practitioners do not compromise health care quality. The data bank, known as the National Practitioner Data Bank, was created to help prevent incompetent practitioners from moving from state to state without disclosure or discovery of their previous damaging or incompetent performance. HHS opened the data bank in September 1990.

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## Data Bank Has Information on Practitioner Adverse Actions and Malpractice Payments

The data bank requires information to be submitted on adverse actions taken against a physician's or dentist's license, clinical privileges, and professional society memberships. State medical and dental boards are required to report disciplinary actions taken against a physician or dentist. Further, hospitals and other health care entities, such as health maintenance organizations and certain medical and dental group practices, must report adverse actions taken against a physician's or dentist's clinical privileges. The Medicare and Medicaid Patient and Program Protection Act of 1987 expanded the scope of the data bank by requiring the reporting of adverse disciplinary actions on all licensed health care practitioners or health care entities by any state licensing authority. HHS has not yet incorporated these provisions into the data bank.

The data bank also contains information on malpractice payments resulting from judgments or settlements for all licensed health care practitioners. Individuals and entities, such as insurance companies and self-insured hospitals who pay malpractice claims or judgments, must report all of these payments to the data bank. As required by the 1986 act, HHS is currently studying whether a dollar threshold should be established under which data on malpractice payments would not be required. HHS plans to publish its report on this in early 1993. In July 1992, we reported on the issues involved in deciding on a dollar threshold.<sup>1</sup>

Hospitals, group medical practices, professional societies, state licensing boards, and practitioners have access to data bank information. The act requires hospitals to query the data bank whenever they are (1) considering hiring or granting clinical privileges to a health care practitioner, or (2) conducting clinical privileging reviews of health care practitioners, which occur every 2 years. Also, physicians, dentists, and

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<sup>1</sup>Practitioner Data Bank: Information on Small Medical Malpractice Payments (GAO/IMTEC-92-56, July 7, 1992).

other health care practitioners may request information concerning themselves. These queries are submitted to the data bank by mail using a standard form.

The operation of the data bank is a relatively simple concept involving the following steps:

- (1) Adverse action and malpractice reports on practitioners are recorded in the data bank.
- (2) When an authorized entity submits a query, data bank files are searched to determine if a practitioner has reports on record.
- (3) The entity is provided with the results of the file search and a user fee is charged for each query.

HHS assigned responsibility for managing the data bank to its Health Resources and Services Administration. In December 1988, the Administration awarded a 5-year, \$15.8-million contract to the Unisys Corporation to develop and operate the National Practitioner Data Bank at the company's computer facility in Camarillo, California. In November 1991, the Unisys component organization responsible for operating the data bank was incorporated under the name Paramax Systems Corporation, a Unisys subsidiary.

As of August 21, 1992, HHS had paid Paramax about \$13.5 million under the contract. At the current rate of spending, HHS expects to reach the total \$15.8-million award amount in early 1993 and it therefore intends to increase the total amount of the contract. In addition, HHS had planned to extend the end of the contract period from December 1993 to October 1994. In its comments on a draft of this report, HHS noted that it now plans to further extend the contract to June 1995.

## Initial Development of Data Bank Beset by Problems

In 1990 we evaluated HHS' progress in developing the data bank and reported that HHS had not effectively managed the project.<sup>2</sup> We therefore recommended that (1) the Deputy Assistant Secretary for Information Resources Management provide independent technical oversight of the development, implementation, and operation of the data bank, and (2) the data bank not be opened until effective security procedures had been

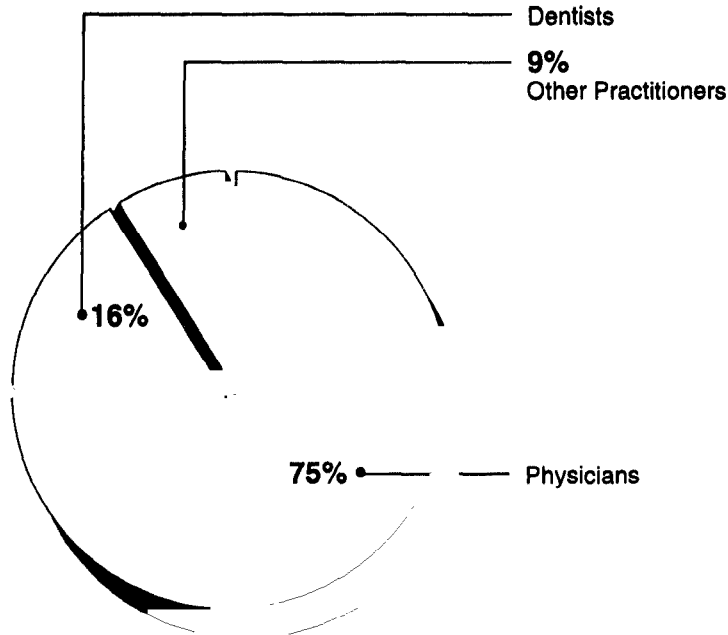
<sup>2</sup>Information System: National Health Practitioner Data Bank Has Not Been Well Managed (GAO/IMTEC-90-68, Aug. 21, 1990).

implemented and the system's software successfully tested. At that time, the data bank's design was recognized to be highly inefficient—relying heavily on manual processes and lacking a modern database management system.

In response to our recommendations, the Secretary of HHS (1) designated the Director of the Bureau of Health Professions, Health Resources and Services Administration as program manager for the data bank to provide increased accountability, and (2) directed the Deputy Assistant Secretary for Information Resources Management to conduct a review of the data bank's operations. HHS also had another contractor, the COMSIS Corporation, conduct an independent validation and verification review to evaluate the adequacy of security procedures and software testing. On the basis of these reviews, the Deputy Assistant Secretary issued a qualified certification of the data bank, which permitted it to open under the condition that Paramax would implement the recommendations on remaining security weaknesses resulting from the independent validation and verification review. After a second review in March 1991, the Deputy Assistant Secretary issued an unqualified certification on the data bank's security but noted that the data bank is a labor-intensive, inefficient, and costly operation.

The data bank started receiving reports and queries immediately after it opened in September 1990. As of August 28, 1992, the data bank contained 35,671 malpractice reports and 6,770 adverse action reports, and had processed 1,620,488 queries. Most of these reports are on actions against physicians, as shown in figure 1.1.

**Figure 1.1: Distribution of Malpractice and Adverse Action Reports in the Data Bank by Major Practitioner Types as of August 28, 1992**



The 1986 act allows HHS to charge fees to users to recover the costs of processing queries. When the data bank opened, this fee was \$2 per query. However, this fee was increased to \$6 within the first year of operations because processing costs were much higher than expected. In addition to user fees, funds have been appropriated annually to pay the costs of on-going system enhancement efforts and HHS' costs for administering the program. In its fiscal year 1993 appropriations request, HHS did not ask for appropriated funds, but instead requested budget authority to spend \$8 million on data bank activities and to recover this entire amount through user fees.

## Objectives, Scope, and Methodology

Since it opened in 1990, hospitals and physicians have expressed concerns over the data bank's timeliness in responding to requests for information, the security of data, and the increasing user fees. Due to these concerns, and to follow up on the issues raised in our prior report, we initiated a review of HHS' management of key aspects of the data bank. Our objectives were to determine whether HHS is (1) ensuring the data bank accepts data and responds to user requests in a timely and secure manner,

(2) adequately monitoring contractor operations of the automated system supporting the data bank, and (3) adequately planning for the future direction and financing of the data bank.

To evaluate the system's ability to accept data and respond to user requests in a timely and secure manner, we analyzed the data bank's records and procedures for processing queries and reports. We also reviewed the August 1992 HHS Office of Inspector General report on the timeliness and usefulness of data received by organizations querying the data bank.<sup>3</sup> We compared data on the actual times for processing queries and reports to the contract requirements, and discussed cases of delays in processing with Paramax officials to identify reasons for delays. We collected information on the data bank's use of social security numbers (SSN) by analyzing automated data bank files on queries and reports to identify the prevalence of SSN use; analyzing the resolution of cases with practitioner identification uncertainties to determine the extent that SSN use would have enabled more efficient processing; and identifying alternative methods of improving the use of SSNs that are employed by an organization that operates a similar data bank.

We reviewed the procedures for handling query responses with sensitive practitioner data, analyzed data on query responses mailed to wrong addresses, and identified the causes of those cases in which sensitive data were provided to unauthorized entities. In addition, we compared the data bank's procedures for processing queries and mailing query responses with sensitive data to the procedures employed by other data banks that handle similar information: the Federation of State Medical Boards' Physician Board Action Data Bank and the American Medical Association's Physician Masterfile. Although the number of queries processed at each of these data banks is about one-fourth of the volume at the National Practitioner Data Bank, the functions of receiving, processing, and responding to queries are comparable.

To determine if HHS is adequately monitoring the contractor's operation of the automated system, we interviewed HHS Health Resources and Services Administration officials responsible for managing the data bank; and reviewed agency files to identify past monitoring activities, deficiencies disclosed, and corrective actions taken. We reviewed the contract with Paramax to identify the provisions for HHS monitoring of automated system operations and reviewed HHS' guidelines for monitoring contractor activities. We also reviewed HHS agreements with the General Services

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<sup>3</sup>National Practitioner Data Bank: Usefulness and Impact of Reports to Hospitals (OEI-01-90-00520).

Administration for contract technical support to identify the provisions for assistance in monitoring the automated system and evaluated associated records to determine the extent to which such services were used. We also observed the contractor's operation of the data bank in Camarillo, California, and examined its records to determine the extent to which known deficiencies were corrected. For weaknesses that we identified in the automated system operations, we interviewed HHS officials to ascertain the reasons that these weaknesses had not been identified and corrected by HHS.

Concerning the future direction and financing of the system, we identified HHS' plans for modernizing and expanding the data bank and evaluated the extent to which HHS was using a sound system development approach. We identified the steps taken and those planned for developing the requirements for the new automated system and contracting for system development and operations. We reviewed available documentation on the requirements identified at the time of our review and determined whether they addressed known weaknesses in the current system.

We conducted our work in accordance with generally accepted government auditing standards, from November 1991 to September 1992, at the Health Resources and Services Administration's headquarters in Rockville, Maryland; HHS' headquarters in Washington, D.C.; and Paramax's computer facility in Camarillo, California. The views of HHS officials, including the Director of the Bureau of Health Professions, other senior officials who are responsible for the data bank, and HHS Office of Inspector General officials, were sought during the course of our work and their comments have been incorporated where appropriate. We also sought the views of Paramax officials responsible for operating the data bank and incorporated their comments where appropriate. In addition, we obtained comments from HHS on a draft of this report. These comments are presented and evaluated in our report.

# Data Bank's Processing Delays and Security Problems Continue

Although the data bank has been operating for over 2 years, the timeliness of responses to queries and the security over sensitive practitioner data continue to be concerns. While an initial processing backlog of queries has been eliminated, in many cases users still do not receive responses to their queries for several weeks. Three factors contribute to these lengthy response times. First, queries are submitted on paper to a manually intensive data bank operation—more efficient and timely methods, such as telecommunications, are not used. Secondly, the frequent absence of SSNs on reports and queries makes processing more difficult and time-consuming. Finally, software problems often cause premature termination of processing. These processing problems adversely affect hospitals—about one-fifth of those surveyed stated they are not receiving query responses before making decisions on granting privileges to practitioners.

The data bank also does not provide adequate security for sensitive practitioner data. Because of the sensitivity of information in malpractice and adverse action reports, the Health Care Quality Improvement Act of 1986 prohibits the release of specific information to unauthorized parties. However, due to insufficient internal controls, some reports and queries have been mailed to the wrong addresses. In at least six of these cases, health care organizations received sensitive practitioner data to which they were not entitled.

## Initial Processing Backlogs Eliminated but Timeliness Problems Continue

Soon after opening in 1990, the data bank began experiencing significant delays in processing queries and reports, due to the high volume of queries and the contractor's understaffing of data entry operations. During the first 6 months of operations, the backlog in processing rose to over 134,000 queries and about 2,900 reports. This backlog was later eliminated by hiring a subcontractor to perform data entry.

In addition to the backlog problem, during the first 16 months of operations, the data bank's automated system could not complete the processing of 6,895 queries. In these cases, sufficient data were not available to allow the system to determine whether the queried practitioner had a report on file. Further, the system's design did not permit contractor personnel to access the automated identification files and resolve the incomplete cases. In January 1992, the data bank implemented system modifications and hired personnel to resolve these cases. However, by this time responses had been delayed up to 16 months on about 6,500 queries on practitioners who had malpractice or adverse



action reports in the data bank, and about 1,100 malpractice and adverse action reports had not been recorded.

Although this processing backlog has been eliminated, the data bank continues to take up to several weeks to respond to queries. Recognizing that querying the data bank is a highly manual and time-consuming process, HHS established a 5-day timeliness standard for processing queries on one practitioner and a 20-day standard for those queries asking for information on multiple practitioners. For the 6-month period ending June 1992, HHS exceeded these standards in about 10 percent of all cases. Another similar data bank organization—the Federation of State Medical Board's data bank—uses telecommunications for about 50 percent of its total queries enabling it to process these queries immediately.

Timeliness of responses is a concern of many of the 142 hospitals that responded to a recent survey by the HHS Office of Inspector General. The Inspector General surveyed a sample of hospitals who had received query responses from the data bank's opening through March 1992. According to data provided by the surveyed organizations, the median time from mailing of the query to receipt of the response was 26 days. While the respondents noted that the data bank's timeliness had improved, about 20 percent said they did not receive responses in time to be considered in decisions to extend privileges to practitioners. According to HHS records, health practitioners have also criticized the data bank for its slow responses and potential impact on employment. As discussed below, the data bank's lack of electronic communications, the absence of social security numbers, and software deficiencies all contribute to longer response times.

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### **Lack of Electronic Communications Slows Responses**

The data bank was designed as a manually intensive operation that relies on paper documents for the submission and response to queries. According to an HHS official who was involved in initial design decisions several years ago, the data bank was not designed to have the capability for electronic query submissions and responses because (1) the contractor's proposal specified the use of paper documents for these processes, and (2) HHS officials believed that hospitals and state licensing boards did not have the capability to use electronic media.

Due to the design of the data bank, the data bank contractor (1) has a subcontractor perform data entry at a current cost of about \$500,000 annually, and (2) employs 17 personnel to manually screen and process paper documents containing queries. The contractor's staff manually

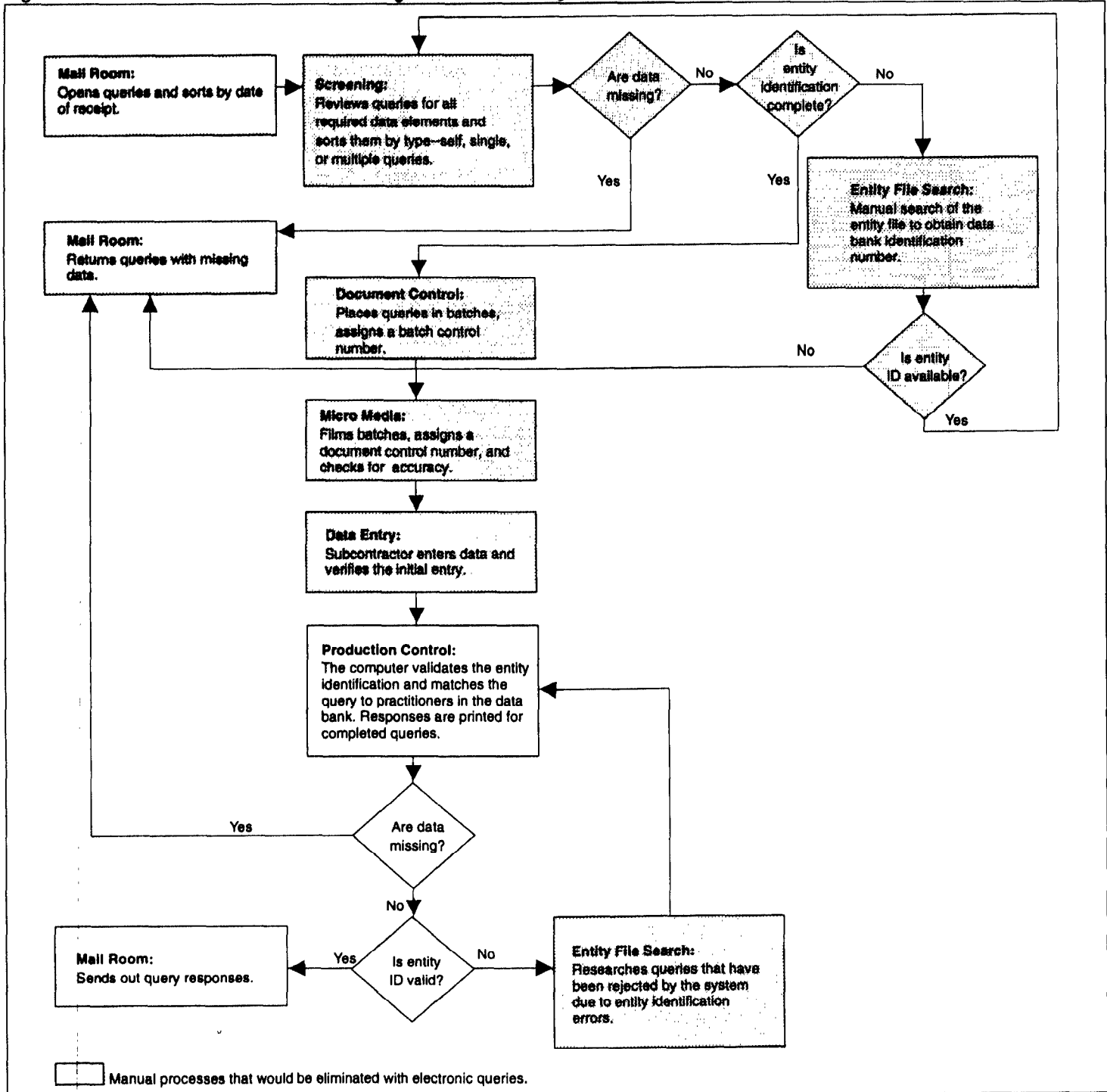
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**Chapter 2**  
**Data Bank's Processing Delays and Security**  
**Problems Continue**

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record the receipt of queries and check them for completeness prior to data entry—a time-consuming and labor-intensive process, as shown in figure 2.1.

Figure 2.1: Manual and Automated Processing of Queries Through the Data Bank



As previously noted, organizations that use electronic media are able to process queries more quickly. For example, at the Federation of State Medical Board's data bank, users have information available immediately via telecommunications on those practitioners who have no reports in the system. The American Medical Association also provides electronic query capabilities to some users of its data bank. Although the American Medical Association primarily receives queries on paper documents, the nonsensitive portion of its data bank is directly available to these users through telecommunications.

To encourage organizations to use electronic media to query its data bank, the Federation of State Medical Boards implemented lower fees for this method of query, but charges higher fees for queries that must be manually processed. This fee structure recognizes that the Federation's operating costs for electronic processing are much lower.

To improve timeliness and reduce costs, HHS is implementing provisions for organizations to submit queries using diskettes or telecommunications. The data bank tested the software for this process and started distributing the software and instruction package to users in September 1992. However, HHS has not provided fee incentives for user organizations to employ these new capabilities. HHS officials responsible for managing the data bank are unsure whether to implement reduced user fees for electronic submissions and telecommunication response capabilities and therefore do not currently plan to revise the fee structure.

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### Processing Delayed When SSNs Are Not Available

Query processing is more time-consuming when the automated system does not have practitioner SSNs on file. In such instances, staff often must manually research the cases to resolve them—adding several days to the time needed to respond to the query.

Originators of reports and queries are not required to and usually do not supply SSNs to the data bank. For instance, on the reports submitted to the data bank through March 17, 1992, SSNs were supplied on 31 percent of the reports and 46 percent of the queries. Initially, HHS planned to require SSNs on reports and queries to the data bank, but it dropped these plans because the law does not allow such a requirement.

When the data bank's records and a query both have SSNs, the automated system can easily determine whether they are for the same person. If one or the other does not have a SSN, the automated system compares other

types of identification data, such as state medical board license numbers and graduation dates. However, a certain match of identities cannot be determined using this comparison unless at least two items are the same. If only one item is the same, the case is considered a partial match, and it is placed in the data bank's "anomaly" file until it can be manually researched, generally adding another 7 to 10 days to the data bank's response time. The number of cases sent to this file is significant—6,895 during the first 16 months of operation. Over 90 percent of these cases could have been processed by the automated system if SSNs had been used on both the reports and queries.

Although the SSN is a data element on both querying and reporting forms, HHS has not specifically encouraged users to supply SSNs in making queries. The Federation of State Medical Boards does not require SSNs but has actively encouraged their users to supply them, and Federation officials estimate that they now receive SSNs on about 75 percent of their queries. HHS has proposed amending the authorizing legislation so it could require SSNs on reports and queries. However, until such authority is provided, HHS officials agreed that the data bank should encourage organizations to use SSNs whenever possible. To this end, prompts have been built into the diskette and telecommunication package that was sent to users in September 1992, encouraging SSNs to be included. In addition, HHS is considering sending information to reporting and querying organizations encouraging the use of SSNs.

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**Software Deficiencies**  
**Cause Processing Delays**

The processing of queries also has been delayed because of deficiencies in the system's software. The system has prematurely terminated daily batch processing on several occasions due to inadequate data edits in the system's software. For example, when a duplicate record exists or an alpha character appears in a numeric field, the system prematurely terminates processing the entire batch of queries for the day. In some cases, this has delayed processing of query responses for several days. During the 6-month period ending June 1992, the system stopped processing on 17 occasions due to this problem. About 75 percent of the cases in which query responses were not provided within the data bank's 5- and 20-day response standards were caused by these stoppages.

According to HHS officials responsible for data bank operations, Paramax plans to install a software revision to the automated system to address this deficiency. The planned revision will suspend only the individual case that cannot be processed; all other transactions will continue to be processed.

## Processes for Handling Query Responses Do Not Provide Needed Security for Sensitive Data

Each month the data bank mails about 1,400 query responses and 3,500 pieces of correspondence to entities and practitioners that include information on adverse actions and malpractice payments. Although the 1986 act prohibits release of specific information to unauthorized parties, the data bank does not have sufficient controls in place to ensure that responses with sensitive data are mailed to the correct address.

Our analysis of data bank records for the 12 months ending January 1992 showed an average of 250 queries and other correspondence, some of which contain sensitive practitioner data, are returned to the data bank each month because they were mailed to the wrong addresses. HHS does not know the number of times that documents were mailed to wrong addresses and not returned to the data bank. Consequently, it does not know the number of cases in which sensitive data were sent to unauthorized parties.

Our analysis also identified six cases in which user organizations informed the data bank that they had received sensitive practitioner data to which they were not entitled. Of these cases, three were caused by contractor errors in matching the practitioner on a report with one on a query, two were caused by mishandling of mail, and the other case was due to data entry errors in recording entity identification numbers.

Other organizations that manage similar data exercise greater care in releasing sensitive reports on practitioners. For example, at the Federation of State Medical Boards, additional manual checks are made for responses with sensitive reports to ensure that the names and addresses are the same on the query, the query response, and the mailing label. The Federation also manually checks the identification data on these cases to ensure that the report is for the practitioner identified in the query, and contacts the querying entity if additional information is needed to process the query. At the American Medical Association, before sensitive practitioner data are released, staff are required to confirm with the applicable reporting entity that a physician has a sensitive report on record.

According to data bank contractor officials, the system was designed without the types of controls used by other organizations because officials did not foresee significant errors in mailing addresses or physical handling of mail. HHS officials responsible for the data bank agreed that mailing errors should be reduced and they therefore plan to make changes to ensure that query responses to multiple parties are not placed in the same envelope for mailing. However, these planned changes will not remedy the

problems with providing data on the wrong practitioner or sending responses to the wrong entity due to identification number errors.

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## Conclusions

HHS has taken steps to improve the data bank's processing of transactions. However, deficiencies remain that are causing slow responses to queries. The data bank has a query process that relies on antiquated and costly manually intensive processing. Further, HHS has not modified its fee structure to encourage electronic querying, and has not done enough to encourage the use of SSNs. HHS will not obtain optimum timeliness of responses until these deficiencies are remedied.

Weaknesses in the controls over sensitive information mailed by the data bank have allowed incidents in which practitioner malpractice or adverse actions reports were provided to the wrong parties. Continued mishandling of sensitive data increases the risk of an incident that could seriously undermine the integrity of the data bank.

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## Recommendations

To improve the data bank's timeliness in responding to queries, we recommend that the Secretary of HHS direct the Administrator of the Health Resources and Services Administration to (1) establish a user fee policy that sets fees commensurate with the costs for processing queries for each type of media used, and (2) send information to reporting and querying organizations that encourages the use of SSNs and explains how supplying SSNs can improve the timeliness of query responses.

To improve the handling of query responses containing sensitive malpractice payment or adverse action information, we recommend that the Secretary direct the Administrator of the Health Resources and Services Administration to institute additional safeguards to ensure that practitioner identification data on these queries match reports and that responses are mailed to the correct recipients.

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## Agency Comments and Our Evaluation

HHS agreed that user fees should be commensurate with costs based on the type of media used and is examining the feasibility of a variable fee structure. It does not plan to reduce fees for queries using electronic media until cost reductions are realized. We agree that HHS should base its fees on reliable cost data. Since it is now implementing processes for electronic queries, HHS should have a basis for adjusting the fees in the near future.

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Concerning our recommendation to encourage reporting and querying organizations to supply SSNs, HHS stated that it had sent a proposal to the Congress to provide for mandatory reporting of SSNs, but no action had been taken on the proposal. HHS did not state whether it planned to implement our recommendation. We continue to believe that HHS should proceed with the steps that it was considering to encourage organizations to supply SSNs on reports and queries. Such action will increase the availability of SSNs on reports and queries and enable more timely query responses.

HHS stated that its current controls for handling query responses are sufficient; however, it specified a number of recently implemented and planned changes to increase the security of paper documents mailed by the data bank. HHS also plans to reduce mailing errors by modifying its processes to enable the electronic transmission of query responses. Although these actions will improve the handling of mail, HHS did not address the other two causes of sensitive data being sent to the wrong parties: (1) errors in matching the practitioner on a report with one on a query, and (2) errors in recording entity identification numbers. As previously discussed, other organizations that manage similar data have implemented safeguards to address these types of errors. We continue to believe that comparable safeguards should be implemented at the data bank for those query responses containing sensitive data. Such action will decrease the risk of an incident that could undermine the integrity of the data bank.



# HHS Is Not Adequately Monitoring the Data Bank's Automated System

HHS' current level of monitoring has allowed its contractor to operate the data bank's automated system without properly correcting known deficiencies or implementing approved procedures. HHS contracted for technical assistance and hired a computer specialist but has not effectively used these resources to monitor the contractor's operation of the automated system. Although HHS officials contend that monitoring was limited because of insufficient resources, the agency has had funds available for this purpose that have not been used. Due to the inadequate monitoring, system processing deficiencies continue, system documentation is inaccurate, and proposed changes have not been thoroughly reviewed.

## Extensive Need for Technical Oversight

When the data bank opened in September 1990, documentation on the operation of the automated system was incomplete and a major portion of the system's software had not been adequately tested. For example, the automated system did not contain adequate data edits; the software had not been fully tested; data backup and recovery procedures had not been formulated and tested; and the cumbersome, difficult-to-maintain file structure needed to be replaced with a modern database management system.

To correct these deficiencies and improve system capabilities, the contractor proposed a large number of changes requiring HHS review and approval. As of June 26, 1992, 585 changes to the automated system had been proposed and 337 had been approved. The contractor had completed 288 of the approved system changes, 39 were in progress, and 10 had not been started. Some of these changes were minor, but others were major changes such as

- providing the capability to search files and complete the processing of reports and queries that had inadequate data for normal processing,
- designing a data entry package that would enable organizations to use diskettes or telecommunications for submitting queries, and
- creating the capability to merge separate records for the same practitioner.

To monitor Paramax's efforts in operating the automated system, HHS specified in the contract that it would make periodic on-site reviews of the contractor's operation of the automated system, including security, promptness of service, and adherence to policies and procedures. Such

reviews are critical to ensuring that the contractor operates the automated system in an efficient and effective manner.

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## HHS Has Performed Little Monitoring of Automated System Operations

To provide technical oversight of the contractor's operation of the automated system, HHS contracted with one vendor and hired a computer specialist. However, these two HHS resources have conducted little monitoring of Paramax's operation of the automated system.

HHS contracted with the COMSIS Corporation, through the General Services Administration, for specific studies of Paramax's operations and products. Under the contract COMSIS conducted (1) a study of the data bank's operational efficiency, (2) a review of the continuity-of-operations plan, and (3) a review of a schedule of changes to the automated system. The contract also included provisions for COMSIS to make up to three trips per year to Paramax's computer facility to examine the implementation of automated system procedures. However, during fiscal year 1992, COMSIS did not perform any on-site examinations of the automated system.

HHS also hired a computer specialist to provide technical support in monitoring the operation of the automated system. However, this person did not perform any on-site monitoring of the automated system at the data bank in Camarillo, California, from December 1990 through November 1991, at which time he transferred to another position. HHS then hired another computer specialist in March 1992 to assume these duties. As of August 1992, the computer specialist had made two trips to Camarillo. However, the primary purpose of these trips was to assess the package being developed for submission of queries on electronic media, instead of providing oversight of the contractor's operation of the automated system.

According to HHS officials, they limited their efforts in monitoring the automated system because of limited resources. However, HHS had funds available for additional COMSIS monitoring efforts that were not used. HHS had committed \$721,000 to the COMSIS contract for fiscal years 1990 through 1992, but less than half of these funds had been expended as of May 1992. In addition, HHS requested fiscal year 1992 funds for system development and technical assistance, but used the funds received for HHS salaries and expenses, rather than for COMSIS' monitoring of Paramax. In prior years these salaries had been paid from the agency's regular appropriations for administrative expenses.

## Inadequate Monitoring Allows Serious Deficiencies

HHS' current level of monitoring the contractor has allowed serious deficiencies to continue. These include system processing problems, improper implementation of system maintenance and security procedures, and inadequate reviews of contractor proposals.

The system continues to prematurely terminate processing because of inadequate automated data edits and other system weaknesses. For example, as discussed in chapter 2, when a duplicate record exists or an alpha character appears in a numeric field, the system terminates processing prematurely. A contractor official responsible for software development attributed these problems primarily to inadequate testing.

Although the best method of monitoring the contractor's software testing would be to observe the actual tests, HHS' computer specialist did not visit the contractor's site during 1991 when two major revisions to the automated system were installed and tested. Also, the computer specialist could not conduct a desk review of the system tests for the two revisions because the contractor had not completed documenting the test results. According to the contractor officials responsible for managing the automated system, Paramax personnel did not complete this documentation because they needed to work on new system changes. HHS is now requiring the contractor to supply its test plans before testing software revisions.

Poor monitoring also failed to detect inadequate system maintenance and security procedures. For example, the contractor's records of system data and documentation were inaccurate. The contractor often made changes to the system software that were never documented on the records in storage. In addition, the contractor was not backing up all automated records, including applications software, and placing them in storage. This is required by the data bank's security procedures and the continuity of operations plan. These weaknesses increase the risk of data losses in the event of accidents or natural disasters.

HHS has also been making only cursory reviews of contractor proposals for system changes. HHS' computer specialist performed a desk review of these proposals, but did so without any supporting documentation. Furthermore, because HHS did not request copies of the system's computer programs, data sets, or software documentation until recently, the specialist had no baseline against which to evaluate the changes. As a result, HHS has not been able to determine (1) if a change will produce the

desired effect or if it will cause additional problems, and (2) the reasonableness of the contractor's staff-time estimates.

At the conclusion of our review, the new HHS computer specialist stated that he had begun performing more extensive reviews of contractor proposals. Further, HHS officials responsible for managing the data bank told us that they now plan to use contractors to provide better oversight at Paramax's computer facility. Such oversight is critical in identifying and fixing problems with the automated system and thereby safeguarding the viability of the data bank.

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## Conclusions

Although HHS knew that the data bank had serious deficiencies when it opened and that the contractor would need to implement major improvements, HHS has not effectively monitored the contractor's operation of the automated system. Even though contract monitoring resources have been available, HHS has not used them. As a result, HHS has allowed deficiencies to go uncorrected and operational procedures to be improperly implemented.

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## Recommendation

We recommend that the Secretary of HHS direct the Administrator of the Health Resources and Services Administration to use necessary technical expertise to perform routine on-site monitoring of the contractor's operation of the automated system. Such monitoring should include, at a minimum, (1) comprehensive reviews of the contractor's implementation of test plans, corrective actions to remedy known weaknesses, and documentation for data backup and storage; (2) obtaining full documentation of the automated system, including software; and (3) analyses of contractor proposals of system changes based on reviews of system documentation and test results.

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## Agency Comments

HHS agreed with our recommendation and is pursuing additional contractor support to provide additional oversight at Paramax's computer facility. HHS plans to focus its increased monitoring at key points in the design, testing, and implementation of revisions to the automated system.

# HHS Has Not Adequately Planned for the Future Direction and Financing of the System

Although HHS has initiated efforts to redesign the data bank's current inefficient automated system, the agency's plans are flawed and are based on funding uncertainties. HHS' program manager for the data bank appointed a project team which, in turn, established a system development plan. However, the timing and sequence of development tasks in this plan do not follow a sound approach, and user needs have not been adequately considered. As a result, HHS may develop an inefficient system that does not eliminate existing deficiencies.

Because HHS' funding approach for the project is based on an uncertain premise, delays in developing an improved automated system could also occur. Although HHS plans to pay for the system development with user fees, it does not have specific authority to do this. Therefore, HHS may need to delay awarding a contract for new system development until it obtains such authority.

## Modernization Planning Does Not Follow a Sound Approach

Soon after the data bank began operating, the data bank's program manager recognized that extensive changes were needed to modify the current automated system to give it more efficient capabilities. Therefore, in November 1991, he appointed a long-term planning committee to examine the options for developing and installing a new automated system at the end of the contract for the current system. The long-term planning committee reviewed existing studies and documents and, in an April 1992 report, concluded that the weaknesses of the current system should be identified and corrected with a new system that uses more current technology, such as a modern database management system. The committee recommended establishing a project team responsible for developing and implementing a plan for acquiring the new system.

In response to the committee's recommendation, the program manager established a project team and assigned it the responsibility of acquiring a new automated system for the data bank. To supplement the team's efforts, HHS contracted with COMSIS to perform requirements and alternatives analyses.

Although the project team developed a plan to acquire a new system, the plan is flawed because it does not follow a sound development approach. The development of an automated information system is a disciplined life-cycle process, with prescribed phases that should be successfully completed before proceeding to the next phase. Accordingly, successful

system development normally proceeds through the following phases: (1) system planning and initiation, which includes identifying user needs; (2) requirements definition and analysis of alternatives, which includes defining and validating functional, data, and operational requirements and identifying alternatives to meet those requirements; (3) design and development, which involves developing detailed system design documents and preparing test plans; (4) programming and testing, which includes writing software and testing the system to make sure requirements are met; and (5) implementation, which involves installing the new system and converting operations from the old system.

The project team's plan does not follow this process. Instead, the plan's schedule called for the team to work simultaneously from August through December 1992 on requirements analysis, alternatives analysis, system design, user needs, and procurement-related documents. HHS' own guidelines specify that such critical tasks should not be performed at the same time, in order to avoid acquiring a system that does not work as planned.

According to project team officials, they formulated the plan by basing it on the target date for a new operational system. They subtracted the amount of time needed for the contract award process from the target date, and then identified the time remaining for system development tasks. The leader of the project team explained that he adopted this approach because it was the only way the team could meet the program manager's mandate of having a new system in place by the end of the contract period for the current system. However, such an approach greatly increases the risk that the new system will not fix existing deficiencies and will not address users' needs.

The risk of HHS' system development not meeting users' needs is already evident. For example, HHS has not yet surveyed users that regularly submit reports and queries to the data bank to identify their needs and preferences. As previously discussed and as recognized by HHS' guidance for acquiring automated systems, identifying specific user needs is a critical first step in a system development project. However, HHS has thus far limited its contacts to discussions with selected representatives of organizations on the data bank's executive committee and with representatives of the National Association of Medical Staff Services. Neither these representatives nor the data bank contacted the members of these organizations who submit queries and reports. As a result, HHS does not know users' needs concerning query response time (maximum acceptable and preferred), trade-offs between costs and timeliness,

telecommunications, interactive processing of queries, security of telecommunications, price incentives for querying with electronic media, or billing system capabilities.

To address this area, the project team recently decided to ask COMSIS to survey users. However, the team plans to have COMSIS survey only a few selected hospitals and other user organizations because the current development schedule will allow only limited time for this effort.

In addition, even though it does not yet know users' needs, HHS has already had COMSIS develop a statement of work to be used in the solicitation for a new automated system. A statement of work should be prepared after, not before, user needs are identified; and it should address these needs and resulting functional, data, and operational requirements. Further, the statement of work prepared by COMSIS ignored many of the known deficiencies in the current automated system. Specifically, it did not address improvements in the automated system's edits, the use of a modern database management system, interactive processing of queries, or implementation of the data bank's coverage of provisions of the 1987 act. At the conclusion of our review, HHS officials stated that they plan to revise the statement of work to address its many shortfalls.

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## **HHS Funding Plans Face Uncertainty**

While HHS plans to award a contract that includes system development and pay for it with user fees, it does not have the authority to do so. The 1986 act allows HHS only to charge fees to recover the costs of processing queries and providing the information. In response to HHS' fiscal year 1993 budget request, the Fiscal Year 1993 Appropriations Act gave HHS the authority to use fees to recover full operating costs. However, HHS did not specifically request authority to recover system development costs with user fees. Accordingly, no specific provisions were included in the 1993 act on recovering system development costs. HHS may need to delay the award of a contract for new system development until it obtains such authority.

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## **Conclusions**

HHS' approach in developing a new automated system may result in it again acquiring a poorly designed system that does not address users' needs. HHS is emphasizing the acquisition of a new system before the end of the current contract rather than the need to follow a sound system development approach. In addition, delays could occur because of the uncertainty of funding for the new system. HHS' management shortfalls in

developing the new system, when combined with the delayed correction of known deficiencies in the current system and the inadequate monitoring of the contractor's operation of the automated system, raise serious concerns about HHS' management of the data bank.

## Recommendations

We recommend that the Secretary of HHS

- direct the Deputy Assistant Secretary of the Office of Information Resources Management, which is responsible for ensuring consistency with information resources management requirements, to provide independent technical oversight of the HHS organization responsible for developing the new automated system to ensure that it follows sound system development life-cycle practices, including ensuring that a detailed identification of user needs is performed;
- not award a contract for the development of a new automated system until ensuring that user needs have been adequately identified, requirements have been fully defined, and alternatives have been assessed; and
- immediately pursue funding authority for development of the new system.

## Agency Comments and Our Evaluation

HHS agreed that the systems development project should follow a sound system development life-cycle process and a contract should not be awarded for development of the new system until user needs have been adequately identified, requirements have been fully defined, and alternatives have been assessed. HHS stated that the Deputy Assistant Secretary for Information Resources Management is providing oversight and will ensure that (1) such processes are followed in planning for the new system, and (2) user needs are adequately identified and addressed before approving the request for proposals for the new system. In addition, to allow sufficient time for the system development and acquisition processes, HHS stated that it has revised its plans and intends to extend the schedule for new system development to allow sufficient time for a full and proper recompetition.

Regarding the funding of the system development effort, HHS stated that language in the Fiscal Year 1993 Appropriations Act provides the authority to recover all costs of operating the data bank, including those for the new system, through user fees. We agree that the act provides authority to recover operating costs with user fees; however, HHS did not request nor does the act specifically provide authority to recover system development



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costs with user fees. Therefore, we believe HHS still needs to immediately pursue funding authority for development of the new system.

# Comments From the Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

DEC 30 1992

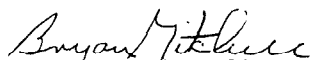
Mr. Ralph V. Carlone  
Assistant Comptroller General  
United States General  
Accounting Office  
Washington, D.C. 20548

Dear Mr. Carlone:

Enclosed are the Department's comments on your draft report, "Health Information Systems: National Practitioner Data Bank Continues to Experience Problems." The comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

The Department appreciates the opportunity to comment on this draft report before its publication.

Sincerely yours,

  
Bryan B. Mitchell  
Principal Deputy Inspector General

Enclosure

COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES  
ON THE GENERAL ACCOUNTING OFFICE DRAFT REPORT "HEALTH  
INFORMATION SYSTEMS: NATIONAL PRACTITIONER DATA BANK  
CONTINUES TO EXPERIENCE PROBLEMS"  
GAO/IMTEC-93-1, OCTOBER 1992

GENERAL COMMENTS

In August 1990, the General Accounting Office (GAO) published a report highly critical of the Department's management of the National Practitioner Data Bank (NPDB or Data Bank) project. As a part of that report, the GAO documented three areas of agreement with the Department for improvement in the planning and implementation of the Data Bank. We believe the current report should acknowledge the Health Resources and Services Administration's (HRSA) compliance with and success in carrying out those agreements which are as follows:

1. There should be a specific HRSA official who is responsible for the overall management of the Data Bank's implementation. Dr. Fitzhugh Mullan, Director, Bureau of Health Professions (BHP), was designated project manager in August 1990 and continues to be the designated responsible official.
2. The Department's Deputy Assistant Secretary for Information Resources Management (DASIRM), OS, will provide technical oversight to HRSA. The HRSA, in consultation with the DASIRM, arranged through the General Services Administration (GSA) for two independent validation and verification reviews in 1990 and 1991. The DASIRM has maintained active oversight and participation in the management of the current system as well as planning for the future. The DASIRM has personally participated in several reviews and in a workshop designed to learn the needs of internal customers of the Data Bank.
3. The Data Bank will not be opened until the DASIRM provides assurances that effective security procedures have been established and that software programs have been successfully tested. The first independent validation and verification reviews conducted by GSA confirmed that security procedures had been established and software programs had been tested sufficiently which enabled the Data Bank to open in September 1990. See a further discussion on security issues below.

Along with acknowledgement of HRSA's response to the 1990 GAO report, we believe it would be worthwhile to recognize that while flaws remain and improvements can be made, the Data Bank is operating reasonably well. The Data Bank is receiving

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reports and responding to queries with an improving rate of success. We are continuing to make changes in the system which will make it both more efficient and more responsive.

The following are comments on the recommendations directed to HRSA and the Office of the Assistant Secretary for Management and Budget, OS.

GAO RECOMMENDATION

To improve the data bank's timeliness in responding to queries, we recommend that the Secretary of HHS direct the Administrator of the Health Resources and Services Administration to:

- (1) Establish a user fee policy that sets fees commensurate with the costs for processing queries for each type of media used.

DEPARTMENT COMMENT

We agree that user fees should be commensurate with costs based on the type of media used. HRSA is looking at the feasibility of a variable fee structure along with other alternatives. HRSA presented the issues to the NPDB Executive Committee at its December 1992 meeting. The Committee's response was generally favorable. We expect that a decision on the appropriate course of action to be taken will be made and implemented during Fiscal Year (FY) 1993.

The report suggests that HRSA should reduce fees for those submitting their queries electronically as an incentive for others to follow suit. To date, hospital response to the offering of the electronic querying option has been substantial and continues to grow beyond our initial expectations. We believe there is already a built-in incentive because of likely reductions in preparation costs at the user's end. Since the population of both queriers and practitioners is fairly static, it would seem more prudent to tie fee reductions to any reductions we may realize in the future cost of operating the Data Bank.

GAO RECOMMENDATION

- (2) Encourage reporting and querying organizations to supply SSNs.

DEPARTMENT COMMENT

Shortly after the Data Bank opened, the Department sent a proposal to the Congress to provide for the mandatory reporting of social security numbers (SSNs). The Congress, however, did not act on the proposal.

GAO RECOMMENDATION

To improve the handling of query responses containing sensitive malpractice payment or adverse action information, we recommend that the Secretary direct the Administrator of the Health Resources and Services Administration to institute additional safeguards to ensure that practitioner identification data on these queries match reports and that responses are mailed to the correct recipients.

DEPARTMENT COMMENT

We believe that the current controls over the handling of query responses containing sensitive malpractice payment and adverse action information are sufficient. However, a number of actions have been taken and others are being planned to increase the security of documents handled by the Data Bank.

The HRSA and its contractor have made the following changes to the current NPDB operating system and procedures to increase the security of paper documents mailed by the Data Bank.

- o To reduce the incidence of pages from one query response inadvertently being mixed with another query response, the printing software has been modified to print additional identification information on every page of a query response. Mailing personnel have been instructed to visually verify that all pages belong to the same query response.
- o To reduce the possibility of mailing a query response to the wrong or incomplete address, entities have been asked to submit a single complete official address to which all query responses will be mailed. This official mailing address will be verified annually and system software has been modified to use only the official mailing address rather than the address on an individual query. This practice both ensures that responses are mailed to the proper address and makes it more difficult for fraudulent queries to obtain responses.
- o To eliminate the possibility of inadvertently placing a query response intended for one entity into an envelope

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addressed to another entity, mailing addresses are no longer printed on envelopes. Official mailing addresses are now printed only on the query responses themselves. The responses are placed in envelopes with transparent windows thereby completely eliminating the possible human error of placing a query response in the wrong envelope.

We are also planning a change to reduce the most common human error of placing responses for two different entities into the same envelope. The system's software will be modified to print very large (i.e., 5 or 6 inches) bold sequence numbers on colored pages that will separate query responses. Personnel who remove these separator pages and place the query responses into envelopes for mailing will be required to verify that the separator page sequence numbers are consecutive. A missing sequence number would indicate that the corresponding query response had not been separated from the response preceding it. As an added verification, the removed sequence-numbered separator pages can be verified by a second individual before the responses are actually mailed.

Our long-range strategy for increasing security is to minimize the use of hard copy paper documents through the use of electronic on-line transmission of queries, responses to queries, adverse action and malpractice payment reports via a secure data network. Equipment and procedures for the electronic transmission of queries to the Data Bank have been installed, tested, and are now operational. Plans are being developed to expand this service to permit the distribution of query responses over the data network under the current system contract. Electronic on-line transmission of adverse actions and malpractice payment reports will be a prime consideration for the new second generation NPDB contract.

GAO RECOMMENDATION

We recommend that the Secretary of HHS direct the Administrator of the Health Resources and Services Administration to use necessary technical expertise to perform routine on-site monitoring of the contractor's operation of the automated system.

DEPARTMENT COMMENT

We concur. HRSA's Division of Quality Assurance (DQA) is seeking to use GSA contractors to provide additional oversight at the contractor's Camarillo Computer Facility (CCF). This increased monitoring will be used particularly at key points in design, testing, and implementation of new releases. We expect this additional resource to be in place in early 1993.

In addition, DQA has negotiated a series of performance measurements with the contractor to ensure timely completion of all required activities. DQA also (1) prepares a weekly report on all queries, reports, and disputes processed; (2) monitors all activity related to user support, including phone calls to the help line, FAXes, and correspondence; (3) reviews all bills and fiscal issues presented by the contractor; and (4) monitors all activities related to dispute processing, including system enhancements.

The DQA has made a concerted effort to monitor the operations and software development of the NPDB. In addition to informal conversations and daily feedback from the contractor, Division staff made a number of site visits to the CCF and data entry facility to monitor performance, productivity, and security; and to review and oversee the planning, testing and implementation of a number of changes to the system.

The DQA also holds a Change Control Board (conference call) meeting with contractor personnel (Paramax, McLean and Paramax, Camarillo) every Thursday to review any operational anomalies and corrections during the week, resolve any problems, track the process of software development, and ensure timely implementation of releases. Every 3 weeks, Paramax representatives and DQA staff meet in Rockville, Maryland to discuss the status of ongoing and future issues with BHP and HRSA management.

Information from the user community is provided via Executive Committee meetings held usually three times a year. The last three were in December 1991, April 1992 and December 1992. During the course of these meetings, Paramax provided data about present and future enhancements to the system.

GAO RECOMMENDATION

We recommend that the Secretary of HHS:

- o Direct the Deputy Assistant Secretary ... [for] Information Resources Management ... to provide independent technical oversight of the HHS organization responsible for developing the new automated system to ensure that it follows sound system development life cycle practices, including ensuring that a detailed identification of user needs is performed.

DEPARTMENT COMMENT

The DASIRM is providing oversight for the development of the new automated system. At HRSA's request, DASIRM staff have

served on the long-term planning committee appointed to plan the future of the Data Bank. The committee looked at the feasibility of developing a new system and assessed acquisition alternatives to accomplish implementation. As a result of the committee's analysis, HRSA organized a project management team to prepare for the new acquisition. The project management team will define the user and systems requirements to be included in the Statement of Work for the follow-on NPDB contract.

In their report, the GAO states that "Although the project team developed a plan to acquire a new system, the plan is flawed because it does not follow a sound development approach." The GAO goes on to describe the various life-cycle processes and phases required for any system development project. We believe that clarification of this comment is required. We agree that a systems development project should follow a sound life-cycle planning process. The project team that the report refers to is actually a project management team whose main responsibility is to prepare for the acquisition process. The initial plan was developed to identify and prepare for the various acquisition steps required to conduct a competitive procurement. HRSA staff are currently working on the Statement of Work for the new design. After the development of user requirements, they should be able to better estimate the complexity and length of this new design effort. The actual complexity and length of the effort will of course be determined by the marketplace. The DASIRM is working with HRSA to ensure that sound system development life cycle procedures are adhered to in planning for the new system.

GAO RECOMMENDATION

- o Not award a contract for the development of a new automated system until ensuring that user needs have been adequately identified, requirements have been fully defined, and alternatives have been assessed.

DEPARTMENT COMMENT

We concur. In addition to oversight, the DASIRM is responsible for reviewing and approving Agency Procurement Requests (APR). The Public Health Service will submit an APR to the DASIRM before issuing a Request for Proposal for the development of the new system. The DASIRM will ensure that user needs are adequately identified and addressed in the Statement of Work.

Determining the needs of Data Bank customers is part of an ongoing process of working with Data Bank Executive Committee



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members and other organizations. The Executive Committee includes representatives of major users--those who query or submit data--of the Data Bank. Meetings are held two or three times a year and members have been frank about their needs and preferences (minutes of meetings are available). The HRSA has just completed a "Data Bank Guidebook Supplement" in which they obtained extensive input from their customers regarding the Data Bank system, forms, instructions and policies. Most Executive Committee members provided written comments regarding their needs and preferences for change.

In addition, a 2nd Generation Planning Team has held three workshops to determine the needs and preferences of Data Bank customers.

- o A workshop for internal customers was held on June 24, 1992. Participants included representatives from the Bureau of Health Professions, Health Resources and Services Administration/IRM, IRM and contracts staff in the Office of the Assistant Secretary for Health, and Office of the Secretary/IRM. HRSA is continuing to work closely with the DASIRM to assure coordination throughout the Department.
- o A workshop for external customers was held on August 6, 1992. Participants included representatives from the Department of Veterans Affairs, Group Health Association (a health maintenance organization), American Hospital Association, American Insurance Association, American Medical Association, American Dental Association, Department of Defense, American College of Surgeons and others.
- o A workshop for the National Association of Medical Staff Services (NAMSS) spokespersons was held on September 16, 1992. NAMSS professionals represent front-line Data Bank users. This association includes medical staff services professionals in hospital credentials offices, quality assurance and risk management offices, and medical staff services offices. Medical staff coordinators make 35 percent of all calls to the Data Bank help line.

The Data Bank 2nd Generation Planning Team is revising the draft Statement of Work to thoroughly address current system deficiencies and improvements in the automated system's edits.

Regarding the GAO draft report's discussion on the Department's proposed scheduling for the development and installation of a new automated system, the initial recompetition schedule has been revised. Based on an estimate

of the time needed to properly conduct the acquisition, HRSA and the DASIRM have asked the Secretary to extend the Delegation of Procurement Authority until June 1995. This should be sufficient time to conduct a full and proper recompetition for the NPDB contract and parallel operation, if needed, with the new and current contractors.

GAO RECOMMENDATION

- o Immediately pursue funding authority for development of the new system.

DEPARTMENT COMMENT

The Congress included in the FY 1993 appropriations language the authority to recover all costs of operating the Data Bank, including those for the new system, through user fees.

TECHNICAL COMMENTS

Page 4 - Discussion on Timeliness of Query Responses

The draft report indicates that about one-fifth of the hospitals surveyed by the Department's Office of Inspector General (OIG) stated that they do not receive query responses before making decisions on granting privileges to practitioners. The draft then indicates the reasons why delays occurred.

We do not believe it is appropriate to link figures in the OIG's report to explanations on why delays occur. Whether hospitals receive responses in time for making decisions on granting privileges to practitioners is as much a factor of how timely hospitals query the Data Bank as it is on how quickly the Data Bank responds. Hospitals often query just before they need to make a decision on privileges. Therefore, even if the Data Bank responds within established time frames, hospitals may not receive responses in time for use in privileging decisions.

Page 24 - First Sentence

The first sentence on page 24 of the draft report suggests that the OIG found that health practitioners criticized the Data Bank for slow responses and the resulting impact on employment decisions. The OIG's review, however, did not report such criticism.

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