

**Memorandum**

Date MAR 16 1994

From June Gibbs Brown
Inspector General *June Gibbs Brown*

Subject Centers for Disease Control and Prevention Has Not Implemented
a Charging System for Data Processing Costs (A-04-92-03503)

To Philip R. Lee, M.D.
Assistant Secretary of Health

The attached final report discusses the results of our review of the Centers for Disease Control and Prevention's (CDC) compliance with requirements for allocating data processing costs to users. The objective of our review was to determine whether CDC charged its users based on the services actually provided, as required by the Office of Management and Budget (OMB) Circular A-130 and departmental policy.

Our review showed that CDC has not complied with requirements to implement a charging system for its data processing costs. Although CDC established a "fee-for-service" policy that data processing costs would be charged to all users, the policy was never implemented.

The CDC funds its data processing operations through an arbitrary surcharge applied to the budget for each of its programs, often resulting in significant overcharges or undercharges to different programs. Accordingly, we are recommending that the Public Health Service (PHS) direct CDC to implement a charging system consistent with the provisions of the Federal Information Processing Standards Publication 96.

In written comments, PHS officials disagreed with our findings and recommendations. They maintained that CDC had complied with the requirements of OMB Circular A-130, and presented a number of arguments against implementing a charging system for its internal users. They agreed, however, that CDC would analyze their charges to all internal users and take action to correct any major inequities.

We are encouraged that CDC will perform an analysis of their surcharges to component units and take appropriate action to correct major inequities. This analysis represents a positive step toward accomplishing the objectives of OMB Circular A-130. However, we are unable to agree that the additional issues raised in the PHS comments provide an adequate rationale for delaying the implementation of a charging system as called for in OMB Circular A-130. While recognizing that

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implementation will require some changes to CDC's financial management practices, we believe the long-term benefits of an appropriate system to identify and charge costs to user components based on their actual usage will outweigh the short-term difficulties of developing that system.

We would appreciate being advised within 60 days on the status of corrective actions taken or planned on our recommendations. Should you wish to discuss the issues raised in this review, please call me or have your staff contact Michael R. Hill, Assistant Inspector General for Public Health Service Audits, at (301) 443-3583.

Attachment

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**CENTERS FOR DISEASE CONTROL AND
PREVENTION HAS NOT IMPLEMENTED
A CHARGING SYSTEM FOR DATA
PROCESSING COSTS**



**JUNE GIBBS BROWN
Inspector General**

**MARCH 1994
A-04-92-03503**

**Memorandum**

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From

June Gibbs Brown
Inspector General

Subject

Centers for Disease Control and Prevention Has Not Implemented
a Charging System for Data Processing Costs (A-04-92-03503)

To

Philip R. Lee, M.D.
Assistant Secretary for Health

This final report presents the results of our review of the Centers for Disease Control and Prevention's (CDC) compliance with requirements for allocating data processing costs to CDC components that use the data center. These costs totaled about \$14.8 million in Fiscal Year (FY) 1992. Our objective was to determine whether CDC charged its data processing costs to users based on the services actually provided, as required by the Office of Management and Budget (OMB) Circular A-130 and the corresponding Department of Health and Human Services (Department) policy.

Our review showed that CDC has not complied with requirements to implement a charging system for its data processing costs. Although CDC established a fee-for-service policy that data processing costs would be charged to its component centers, institutes, and offices based on the services actually provided to those users, the policy was never implemented. Instead, CDC funds data processing operations through an arbitrary surcharge, which can result in significant overcharges or undercharges to some programs.

We believe that implementation of an adequate charging system is essential to equitably distribute the costs of CDC's data processing operations. Without such a system, the Public Health Service (PHS) has little assurance that costs charged to CDC's various programs accurately reflect the resources actually devoted to those programs or that the distribution of costs is consistent with the intent of Congress and the Department as expressed by the funding levels and priorities established for each program. Our analysis of utilization data for FY 1992 indicated that some programs were significantly overcharged for data processing costs while other programs were significantly undercharged.

In their comments on a draft of this report, PHS did not concur with our findings and recommendations and presented several arguments against implementation of a charging system. However, while maintaining that CDC has complied with OMB Circular A-130, they agreed that CDC would perform an analysis of their charges to component units and take action to correct major inequities.

The PHS comments are discussed in the Results of Review section and are attached in their entirety as the Appendix to this report.

BACKGROUND

Within CDC, the Information Resources Management Office (IRMO) has primary responsibility for data processing operations. As shown in CDC's statement of Organization, Mission and Functions, IRMO's responsibilities include:

- o operating CDC's computer center to provide centralized mainframe support to all CDC components;
- o designing, developing and managing all centralized data bases and related information systems;
- o managing all centralized data processing, word processing, voice and data communications facilities; and
- o providing leadership, technical assistance and training to assist other CDC components in managing their information processing activities.

The IRMO is part of CDC's Office of Program Support (OPS), which assists CDC's Director in developing, coordinating and assessing management activities throughout the organization. To carry out its function, OPS includes units devoted to financial management, purchasing and procurement, personnel management, engineering services, and other indirect activities as well as IRMO.

The Paperwork Reduction Act of 1980 (Act) established a broad mandate for Federal agencies to carry out their data processing activities in an effective, efficient and economical manner. Pursuant to the Act and other applicable statutes, OMB issued Circular A-130 in December 1985 to provide Governmentwide policies regarding the management of data processing operations, including a requirement for the implementation of charging systems consistent with standards established in Federal Information Processing Standards (FIPS) Publication 96. The Department endorses the FIPS publications and assigns responsibility for implementing all approved standards to the head of each operating and staff division.

OBJECTIVE, SCOPE AND METHODOLOGY

The objective of our review was to determine whether CDC charged its centers, institutes, and offices for data processing costs based on the type and the priority of

services actually provided, as required by OMB Circular A-130 and departmental policy. We performed this audit in response to a request from the Chairman, Committee on Government Operations, House of Representatives, to review CDC's information resources management activities.

We interviewed CDC officials and staff, and reviewed applicable policies, procedures and other documentation. We also analyzed CDC's budgetary and financial management process with respect to IRMO. In addition, we analyzed documentation related to a cost allocation and recovery system developed by IRMO in 1990. We did not evaluate the reliability, completeness, or internal controls designed to ensure the reliability of IRMO generated utilization data because the information was not being used by CDC.

Our review was limited to IRMO's data processing operations in Atlanta, Georgia. We did not include the other CDC data processing operations in Raleigh, North Carolina or Hyattsville, Maryland because, as dedicated facilities providing services to single users, they are not required to implement charging systems under OMB Circular A-130.

Our review was performed in accordance with generally accepted government auditing standards. Field work on our review was performed at CDC's headquarters in Atlanta, Georgia during the period September 1992 through August 1993.

RESULTS OF REVIEW

The CDC does not charge its data processing costs to users based on the services actually provided, as required by OMB Circular A-130 and departmental policy. Although CDC management recognized this requirement and published a fee-for-service policy in January 1990, it never actually implemented this policy. We were told by IRMO officials that the policy was not implemented due to concerns that charges might "stifle scientific creativity" in CDC's research efforts, but we found no formal documentation of such concerns.

The CDC instead, funds IRMO's data processing operations through an arbitrary surcharge added to the annual budgets of each component center and institute. Because this surcharge, usually representing 20 percent of appropriated funds not earmarked for grants to other organizations, is applied without regard to the extent of services actually provided, PHS has little assurance that data processing costs are equitably distributed among CDC's programs based on the resources actually devoted to each program. Our analysis of utilization data for FY 1992 indicated that some CDC programs

were significantly overcharged for data processing services while other programs had been significantly undercharged.

OMB and Departmental Policy Require Implementation of Charging System

In December 1985, OMB issued Circular A-130, which established management policies for Federal data processing operations. Appendix II to that Circular established policies requiring Federal agencies to account for the total costs of operating an "information technology facility" including personnel, equipment, software, supplies, contracted services and other costs. These agencies are also required to develop and implement a charging system consistent with provisions of FIPS Publication 96.

The FIPS Publication 96, issued in December 1982, provides Federal managers with the standards for systems designed to provide a full accounting of all data processing costs and an equitable distribution of those costs among the user-community based on the resources required for the type and priority of services actually provided.

The Department endorses FIPS publications in Chapter 5 of the departmental Information Resources Management Manual (Manual), entitled "Information Processing Standards Program." In Chapter 5, issued in November 1985, the Manual assigns responsibility to the head of each operating and staff division to ensure that their organizations implement all approved standards.

CDC Has Not Implemented a Charging System

In January 1990, CDC amended its own Manual Guide - Information Resources Management (Guide) to establish a fee-for-service charging system. As stated in the Guide, the overall objectives of CDC's policy were:

"...to encourage effective and efficient utilization of data processing facilities, foster PHS-wide information resources management sharing and integration of resources, maximize CDC scientific and programmatic creativity and flexibility, directly allocate costs based on usage where appropriate, and adhere to applicable Federal IRM regulations and policies."

Despite its publication in a CDC policies and procedures manual, this fee-for-service policy was never implemented. We found no formal documentation explaining the decision not to implement the system but were told by IRMO officials that CDC management felt the system might "stifle scientific creativity" in the use of the computer if budgets were

effected by charges. The CDC continues to rely upon the longstanding practice of funding its OPS units, including IRMO, by applying an arbitrary surcharge to the annual budget requests for each program.

Each CDC center and institute first prepares a budget request for the estimated costs of its respective program activities. These budgets, essentially representing the direct costs of each program, are submitted to CDC's Financial Management Office (FMO).

Following analysis and approval of the individual center and institute budget requests by the CDC Director, FMO applies an additional surcharge to cover the indirect costs of OPS and other support services. In recent years, FMO has added 20 percent to most budget requests exclusive of funds earmarked for grants to other organizations. The FMO then compiles the "loaded" budgets into an overall budget request for CDC. When CDC receives its annual appropriations, CDC first sets aside its program support funds, the amount generated by the surcharge. The remaining funds are then distributed among CDC's centers and institutes based on their respective program responsibilities.

During FY 1992, according to CDC officials, the surcharge provided more than \$97 million for support services, with IRMO receiving almost \$15.6 million. By eliminating cost centers not related to data processing, we estimate that about \$14.8 million of the \$15.6 million represent IRMO's costs of information processing.

This methodology provides little assurance that the charges to CDC's various program activities reflect the actual costs of the data processing services actually provided to the accomplishment of program goals and objectives. Further, there is little assurance that the distribution of IRMO's data processing costs is consistent with the intent of the Congress and the Department as expressed by the funding levels and priorities established for each program.

The IRMO's utilization information for FY 1992 was incomplete at the time of our review and did not account for IRMO's total data processing costs. However, the data can still be used to illustrate the potential inequities resulting from CDC's use of a surcharge to fund its data processing costs without regard to the services actually provided.

- o The CDC's activities related to the prevention of HIV/AIDS have received a high priority from the Department and Congress in recent years, with significant increases in annual appropriations. The costs of those activities accounted for about

32 percent of CDC's total budget in 1992, and the surcharge for HIV/AIDS generated almost 36 percent, or about \$5.3 million, of IRMO's \$14.8 million total data processing costs. The IRMO reports, however, indicate that HIV/AIDS applications accounted for only about 5.9 percent of total utilization, valued at about \$790,000. Using this example, it appears that the HIV/AIDS program was charged approximately \$4.5 million for data processing services provided to other programs.

- o Conversely, surcharges for CDC's Center for Chronic Disease Prevention and Health Promotion (Center) accounted for about \$1.3 million, or 8.8 percent of CDC's IRMO data processing costs during FY 1992. However, utilization reports show that more than \$2.4 million of resources were actually devoted to the Center's programs. Using this example, it appears that the Center was undercharged about \$1.1 million for the data processing services provided by IRMO.

CONCLUSION AND RECOMMENDATIONS

The CDC has not implemented a system to charge its data processing costs to users based on the services actually provided, as required by OMB Circular A-130 and departmental policy. Accordingly, we recommend that PHS take the necessary corrective actions to ensure that CDC implement a charging system that conforms with the aforementioned requirements.

We also recommend that PHS direct CDC to implement a charging system consistent with the provisions of FIPS Publication 96.

PHS Comments

On January 20, 1994, PHS provided us with their formal comments in response to our draft report. The comments are summarized below and are included in their entirety as the Appendix to our report.

In their comments, PHS officials disagreed with our findings and recommendations. They maintained that CDC's current policy of charging only non-CDC users complies fully with the requirements of OMB Circular A-130. However, they have agreed to analyze the reasonableness of CDC's surcharges to component programs and take appropriate actions to correct any major inequities.

The PHS comments also address four basic arguments against the implementation of a system to charge the full costs of CDC's data processing operations to all users as we have recommended. We have summarized these four issues as follows:

- o implementation of a charging system for internal users would be overly complex, administratively burdensome and not cost effective;
- o a charge-back system for internal users could lead to fragmentation of CDC's data bases, information systems and performance measurement indicators by encouraging components to take decentralized approaches to agencywide needs.
- o charges could be detrimental to the operations and accomplishments of CDC components, particularly when faced with inadequate funds to meet new responsibilities for emerging health care concerns; and
- o the ongoing process of transferring users to client servers in a more distributed environment would in time cause exorbitant charges to those few users still reliant upon the mainframe computer.

In a technical comment, the PHS asserts that only about \$5.7 million of the \$14.8 million of data processing costs discussed in our report should be considered subject to a charging system as called for in OMB Circular A-130.

Office of Inspector General Response

We are encouraged that CDC will perform an analysis of their surcharges to component units and take appropriate action to correct major inequities, if any. This analysis represents a positive step toward accomplishing the objectives of OMB Circular A-130.

We cannot agree that CDC's current practice of charging internal users through an arbitrary surcharge complies with the provisions of OMB Circular A-130. Appendix II to the Circular clearly states that all Federal agencies shall "...implement a system to distribute the full cost of providing services to all users" and defines the term "user" to include organizational or programmatic entities "...either internal or external..." to the agency.

We are also unable to agree that the additional issues raised in the PHS comments provide an adequate rationale for delaying the implementation of a charging system as called for in OMB Circular A-130. While recognizing that implementation will

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require some changes to CDC's financial management practices, we believe the long-term benefits of an appropriate system to identify and charge costs to user components based on their actual usage will outweigh the short-term difficulties of developing that system.

With respect to the extent of costs that should be covered by a charging system, we agree that OMB Circular A-130 currently focuses on mainframe operations. However, Circular A-130 does not specifically limit its definitions of "total costs" to those associated with mainframes and, as recognized in the comments, draft amendments to the Circular would specifically cover all centrally provided services.

* * * * *

We would appreciate being advised within 60 days on the status of corrective actions taken or planned on our recommendations. Please refer to Common Identification Number A-04-92-03503 in all correspondence relating to this report. Should you wish to discuss the issues raised by our review and our recommendations, please call me or have your staff contact Michael R. Hill, Assistant Inspector General for Public Health Service Audits, at (301) 443-3582.

APPENDIX



Memorandum

JAN 20 1994

MEMORANDUM

From: Deputy Assistant Secretary for Health Management Operations

Subject: Office of Inspector General (OIG) Draft Report "Centers for Disease Control and Prevention Has Not Implemented a Charging System for Data Processing Costs," CIN: A-04-92-03503

To: Inspector General, OS

Attached are the PHS comments on the subject OIG draft report. We believe that the Centers for Disease Control and Prevention's (CDC) system for charging its data processing costs to users of the Information Resources Management Office computer facility is consistent with Office of Management and Budget requirements and HHS policy. While CDC is going to further analyze this issue, as indicated on page 3 of the attachment, we plan no changes at present to the current CDC charging system.

Anthony L. Itteilag

Attachment

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COMMENTS OF THE PUBLIC HEALTH SERVICE ON THE
OFFICE OF INSPECTOR GENERAL DRAFT REPORT
"CENTERS FOR DISEASE CONTROL AND PREVENTION HAS NOT
IMPLEMENTED A CHARGING SYSTEM FOR DATA PROCESSING COSTS."
CIN: A-04-92-03503

OIG RECOMMENDATION

We recommend that PHS:

- 1) take the necessary corrective actions to ensure that CDC implements a charging system that conforms with the requirements of Office of Management and Budget (OMB) Circular A-130, and HHS policy; and,
- 2) direct CDC to implement a charging system consistent with the provisions of Federal Information Processing Standards (FIPS) Publication 96.

PHS COMMENTS

We believe that the current system which the Centers for Disease Control and Prevention (CDC) has for charging users for the costs of services provided to them by CDC's Information Resources Management Office (IRMO) computer facility is in compliance with the requirements of OMB Circular A-130, "Management of Federal Information Resources," and HHS policy. Under its current charging system, and as required by OMB Circular A-130, CDC has implemented a system for charging external users of CDC's IRMO computer facility on a fee-for-service basis.

We further believe that the decision to not implement a fee-for-service system for internal users of CDC's IRMO computer facility is also consistent with the provisions of OMB Circular A-130 and sound management practice. Our rationale follows.

In Fiscal Year (FY) 1990 and in accordance with OMB Circular A-130 and HHS policy, CDC instituted a fee-for-service system that complies with the requirements of FIPS Publication 96 and other applicable Federal accounting standards. The CDC has implemented the fee-for-service concept externally. Currently, one non-CDC user of the IRMO computer facility is being charged based on the quantity of services received.

At the time that CDC instituted its fee-for-service system, CDC management carefully evaluated the requirements of OMB Circular A-130 and HHS policy. The CDC concluded that it was not required to implement such a fee-for-service arrangement for internal CDC users. This conclusion was based on the

CDC's interpretation of the provisions of Circular A-130 regarding the definition of the term "user" and its belief that the implementation of such a charging system would be overly complex, administratively burdensome, and not cost effective. The PHS agrees with this position.

The CDC is the repository and provider of valuable data resources that are made available to the public. Information technology is fundamental and crucial to the accomplishment of CDC's core mission of improving the health of the Nation's population through public health data collection and analysis. To accomplish its mission the CDC maintains large data bases that all of CDC's centers, institutes, and offices access and manipulate for a variety of purposes. These data bases, however, are not maintained solely to support the function of a particular center, institute or office. Rather, they are maintained to support CDC's overall operations. Consequently, we believe that internal CDC users are not subject to charges on a fee-for-service basis under OMB Circular A-130.

In addition, because there are many programmatic areas at CDC, such as HIV/AIDS, which are cross-cutting, matrix-managed operations, we believe that implementation of a fee-for-service system for charging individual CDC programmatic areas would not be cost effective and might be detrimental to CDC's operations. There are a number of reasons why we believe this to be the case.

First, the CDC performs its mission in a continually changing environment. The data processing services required by CDC internal users are often non-routine, nonrecurring functions that are needed in order to respond to emerging public health concerns. Because the extent and cost of such services cannot be determined or planned in advance, charging internal CDC users on a fee-for-service basis would conflict with CDC's budgeting process and might negatively affect the operations of CDC's centers, institutes, and offices.

Traditionally, new responsibilities for emerging public health concerns are initially inadequately funded. If these new or emerging program areas were required to pay for computer services, they would not be able to take advantage of computer center resources to begin implementing their data collection, surveillance, and analysis functions.

The CDC is rapidly moving in the direction of downsizing its mainframe facility towards a distributed, client-server architecture as the industry moves in that direction. This strategy, along with implementing open systems standards developed by the National Institute of Standards and Technology, is endorsed by HHS and PHS. This is, however, a

long-term process which may require as long as 10 years to complete. As users are transferred from the mainframe to client servers, the mainframe's fixed costs will remain to be distributed to fewer and fewer users. Distributing these fixed costs to users remaining on the mainframe would result in exorbitant charges to them.

Instituting internal charge back for mainframe services at CDC runs counter to CDC's information resources management (IRM) strategic plan, budgeting, and management processes, particularly with respect to program areas that have been traditionally oriented towards mainframe data systems before they have an opportunity to re-engineer towards distributed computing.

Finally, the mainframe serves as a primary tool for CDC's move toward programmatic performance measurement consistent with the Administration's National Performance Review, the Chief Financial Officer's Act of 1990, and the Government Performance and Results Act of 1993. Instituting charge back procedures could have the unintended consequence of fragmenting the approach to agency-wide databases, information systems, and performance measurement indicators by tipping the balance of perceived benefit-cost to decentralized approaches for elements that need centralized management.

For the reasons stated above, we believe that CDC is in compliance with the provision of OMB Circular A-130. We believe that implementation of a charging system like that envisioned by OIG would create unnecessary administrative burdens and consume resources that could be better applied to program operations, without concomitant benefits in programs management. Nonetheless, CDC will perform an analysis of the reasonableness of surcharges paid by each CDC component in light of the computer services obtained. Should any major inequities be found, CDC will consider the appropriate actions to be taken.

TECHNICAL COMMENT

On page 4, the OIG draft report indicates that almost all of the IRMO FY 1992 budget (\$14.8 million of \$15.6 million) is subject to charge back. The OMB Circular A-130 is currently focused on mainframe data center charge back, not all centrally-provided IRM services. The OMB states that clearly in the September 10, 1993 proposed revision to A-130 (transmittal II) which has been published in the Federal Register for public comment (see Summary of Proposed Revisions, Section 6, Definitions). Consequently at the current time, the amount of centrally provided information

resources management services at CDC that is currently subject to charge back is \$5.7 million, not \$14.8 million. Therefore, the examples of inconsistencies between allocable costs and charges for two CDC organizations provided on page 5 of the draft report are inaccurate.

We also recognize, however, that in Circular A-130 transmittal II OMB proposes broadening the definition of Information Technology Facility to become Information Processing Service Organization (IPSO). The IPSO would include all centrally-provided IRM services (this revision is still in draft and not effective at this date). The PHS, through the Office of the Secretary, plans to recommend that OMB not require internal charge back for all IPSO activities.