GAO

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

Accounting and Information
Management Division

B-256096

February 14, 1994

Dr. Neil Stillman
Deputy Assistant Secretary for
  Information Resources Management
Department of Health and Human Services

Dear Dr. Stillman:

At this time we are discontinuing our review of information resources management (IRM) strategic planning in the Public Health Service (PHS) and its agencies (job code 510919). Although preliminary work showed weaknesses in these agencies' IRM planning processes, we believe recent actions taken to improve IRM planning have decreased the need for a detailed review at this time. In closing out this assignment, we would like to share our preliminary observations with you and the PHS agencies for consideration in further improving the IRM planning process.

The overall objective of our review was to determine the extent to which PHS and its agencies were using strategic IRM planning to help fulfill their missions and achieve national health objectives. We performed our work at the Office of the Assistant Secretary of Health and two PHS agencies--the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC). We also gathered general information from the other six PHS agencies on their IRM planning processes. Our work was generally limited to interviewing IRM officials within PHS, FDA, and CDC to identify their specific IRM planning processes; analyzing recent audits and evaluations of IRM activities to identify items that should be addressed in plans; and reviewing current IRM plans to determine if they contained essential elements.

PHS ACTIONS TO IMPROVE
STRATEGIC IRM PLANNING

Several PHS agencies have taken action to improve their IRM planning. These actions are the result of organizational and

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personnel changes during the last 2 years that placed increased emphasis on IRM activities. The new officials are emphasizing strategic planning and using an agencywide approach for such planning rather than relying on each component organization to independently develop and implement its own plan. Preparing the IRM plan gives the agencies the opportunity to address their current and future IRM environments and to strategically position IRM to meet departmental and agency program goals.

For example, FDA has initiated strategic planning activities to examine its information needs. As a basis for its planning, FDA assessed IRM conditions and user needs agencywide. In addition, it is redesigning its planning process to emphasize information systems that support agencywide management of program activities and the elimination of duplicative, incompatible systems.

PHS' Health Resources and Services Administration has also conducted a similar agencywide assessment as a prelude to improving its IRM planning. The Substance Abuse and Mental Health Services Administration, in preparation for its reorganization, assessed IRM needs agencywide for its extramural grants programs--the primary means for carrying out its mission. The National Institutes of Health (NIH) has begun a major initiative to enhance its IRM planning process and plans to establish new IRM planning policies and procedures. The first stage in the development of this new process is to concentrate on developing and implementing methodologies for identifying, integrating, and prioritizing user requirements.

IRM PLANNING CHALLENGES

To make PHS information systems more responsive to mission needs, we believe that PHS and its agencies could consider incorporating some elements widely recognized as beneficial to strategic planning. These elements and the results of our preliminary work are discussed below.

Clearly Link Strategic IRM Plans
to Strategic Business Plans

PHS' IRM planning has focused on acquiring hardware and software rather than building information systems that fully support mission needs. Except for FDA, PHS agencies' IRM

plans have generally not been closely linked with strategic
business plans that specify the strategies, processes,
resources, and information needed to achieve mission
objectives. In some cases, this was because strategic
business plans had not been developed. However, the Office
of the Assistant Secretary of Health and four agencies told
us that they have recently developed or are in the process of
developing strategic business plans and intend to link their
IRM plans to them in the future.

Base Strategic IRM Plans on
Organizationwide Needs

PHS' IRM planning is primarily a summary of plans prepared by
its component agencies; its agencies use this same approach
when developing their agency-specific plans. Therefore,
responsibility for inventorying conditions, assessing user
needs, and developing strategies to meet those needs has been
delegated to the lowest level IRM organizations. This
approach has contributed to duplicate and incompatible
systems, both across different agencies and within the same
agency, for functions such as processing applications for
approval to market specific drugs, biologics, and food
additives; grants management; document tracking; and
accounting. These system weaknesses prevent some users from
accessing data in other component organizations or other
agencies' systems and preclude the collection and aggregation
of data above the program level.

Develop Organizationwide Information
Architectures for PHS and Each Agency
That Provide a Framework to Govern
the Management and Use of Information
and IRM Resources

Neither PHS nor its agencies have developed an information
architecture.[1] For example, FDA and CDC have networks that
connect most staff and have aggressively pursued an open
systems environment. While CDC has a well-developed

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[1] An information architecture, sometimes called a strategic
systems architecture, describes all functional activities to
be performed to achieve a desired mission, the automated
systems elements needed to perform the functions, and the
performance levels of those systems elements.

architecture for its agencywide administrative systems,
neither CDC nor FDA has an information architecture for
program systems.

Perform Periodic Formal Assessments to Identify the Information Needs of Individual Researchers, Regulators, and Managers

Three of the eight PHS agencies conducted agencywide
assessments of user needs, and only one of these--FDA--
focused specifically on individual user needs. FDA gathered
information on the adequacy of IRM support to individual
users. According to FDA's assessment, a significant
percentage of its personnel did not have adequate software,
service support from properly trained IRM staff, access to
data, communication capabilities, or training. FDA found
that this inadequate IRM support resulted in unproductive or
inefficient use of time due to (1) reliance on manual data
searches because access to needed data in electronic form was
not available, (2) difficulty in transferring documents
between electronic mail systems and data systems, (3)
personnel not being trained to use available systems to
access data, and (4) delays in troubleshooting hardware and
software problems.

For Identified Needs, Determine and Use the Relative Costs and Benefits of Alternative Approaches in Prioritizing Projects

IRM organizations in this review generally did not analyze
costs and benefits of projects as part of the planning
process.

In addition to addressing the elements of IRM planning
discussed above, we believe it would be beneficial if IRM
plans clearly addressed the capability of information systems
to measure performance. PHS information systems produce
performance measurement information at two levels. First,
some program offices collect data on resource inputs to
program activities and the timeliness of task completion.
Second, at the national level, PHS collects data on the
health status of the entire U.S. population. None of the PHS
organizations contacted at FDA or CDC collect data that show
individual program contributions to PHS' national health

B-256096

objectives. FDA's efforts to develop performance measures
have focused on its regulatory programs, which are its
primary mission. Neither PHS nor its agencies have addressed
performance measurement needs in the IRM plans.

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We conducted our review from March 1993 through October 1993,
in accordance with generally accepted government auditing
standards. We discussed the issues in this letter with PHS
officials, including senior IRM officials of PHS agencies,
who generally agreed with the information presented.

We request that you inform us within 60 days of the actions
you have taken or intend to take on these matters. If you
would like to discuss these issues, please contact me at
(202) 512-6252 or Ben Ritt, Assistant Director, at (202) 512-
6443.

Sincerely yours,

Frank W. Reilly
Director, Information Resources
    Management/Health, Education,
    and Human Services

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