128109

BY THE U.S. GENERAL ACCOUNTING OFFICE

Report to The Chairman Senate Committee On Veterans' Affairs

Veterans Administration Financial Management Profile

This report describes VA's financial management and accounting systems, including key internal control and automated data processing weaknesses in these systems. The systems are examined using GAO's model that considers financial management in four phases: planning and programming, budgeting, budget execution and accounting, and audits and evaluations. GAO describes VA's efforts to improve the systems and ranks the importance of each financial management system project being developed.

GAO/AFMD-85-34
SEPTEMBER 20, 1985

033424 / 128109

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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

ACCOUNTING AND FINANCIAL
MANAGEMENT DIVISION

B-219894

The Honorable Frank H. Murkowski
Chairman, Committee on Veterans' Affairs
United States Senate

Dear Mr. Chairman:

This report discusses the Veterans Administration's (VA's) financial management systems and their major strengths and weaknesses. It also presents an overview of VA's planned actions to address weaknesses in its systems and upgrade its computer equipment. This report is the first in a series of two reports.

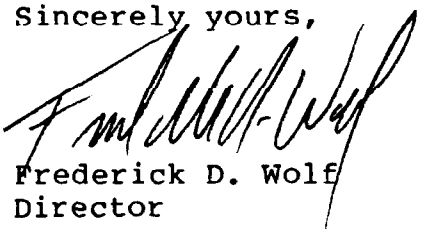
The second report will focus on VA's financial management processes and their integration with supporting financial management systems. This report will address how VA top management sets priorities for construction projects and distinguishes between service connected and non-service connected needs in establishing budget priorities and requests. Both reports, when taken together, will address the concerns raised by your Committee in an August 10, 1984, letter to us.

With respect to VA's planned actions to upgrade its automated systems and computer equipment, VA has two projects underway to acquire a modern, automated hospital patient care and administrative system for its 172 medical centers. Both projects are focused on identifying the best system to meet VA's needs. VA should, however, move expeditiously to identify the best system and to focus its resources on designing, developing, and implementing the selected system.

We obtained comments from the VA on the matters discussed in the report. In commenting on the report, VA disagreed with our characterization of the Beneficiary Identification and Records Locator Subsystem as its main source of claimant eligibility information and with its need for a VA-wide consolidated general ledger. Details of VA's comments and our evaluation are included in the report. VA also made several technical suggestions to clarify matters discussed in the report, and we considered these suggestions in finalizing the report.

This report is also being sent to Senator Alan K. Simpson, Majority Whip, because of his interest in the issues discussed in the report. Also, as arranged with your office, we are sending copies of this report to the Administrator of Veterans Affairs. In addition, copies of this report are being sent to the Senate and House Committees on Appropriations, the Senate Committee on Governmental Affairs, the House Committee on Government Operations, and the Director of the Office of Management and Budget.

Sincerely yours,



Frederick D. Wolf
Director

FOREWORD

GAO has developed a model that considers an agency's financial management function in four phases: planning and programming, budgeting, budget execution and accounting, and audits and evaluations.[1] This financial management model represents a broader perspective than the traditional view of federal financial management and requires that internal controls not be treated separately from other management procedures. When financial management procedures and systems are organized and studied in the four phases, interrelationships among systems and related procedures are highlighted, permitting an analysis of how information flows throughout an agency and an identification of how an agency executes and controls its financial planning, operations, and evaluations.

This profile views the Veterans Administration's (VA's) financial management systems according to the four phases to offer a comprehensive overview of VA's financial management structure. In doing so, the profile serves as a departure point for addressing needed financial management system and internal control improvements. Where agency improvements are needed, the profile fosters an ordered agenda of corrective actions rather than a list of random fixes.

Our purpose here is to identify and describe VA's existing systems and related internal controls. Chapter 1 describes VA's mission, financial resources, and organizational structure and the scope and methodology of our review. Chapter 2 describes VA's financial management system structure and provides an overview of fund control, chapter 3 addresses internal controls in selected systems according to the four-phase model. Chapter 4 discusses VA's initiatives to strengthen its financial management systems, and chapter 5 ranks the importance of system development projects in supporting the agency's financial management activities. A subsequent report will comment on how well the agency uses the financial information provided to carry out the four financial management activities.

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[1] Managing the Cost of Government: Building an Effective Financial Management Structure, volumes 1 and 2, GAO/AFMD 85-35 and 35A, February 1985.

EXECUTIVE SUMMARY

In response to a request from the Chairman, Senate Committee on Veterans' Affairs, GAO prepared this financial management profile of the Veterans Administration (VA). Effective agency financial management functions are the first line of defense against fraud, waste, and mismanagement, and help ensure that the most value is received for each taxpayer dollar spent.

The profile is based on a model that considers an agency's financial management function in four phases: planning and programming, budgeting, budget execution and accounting, and audits and evaluations. Using this model, GAO reviewed agency financial management functions to determine how effectively they are being carried out. The purpose of the review was to

--identify and describe the automated financial management systems,

--identify internal control and automated data processing (ADP) problems in selected systems,

--review VA's initiatives to strengthen financial management, and

--rank the importance of the automated financial system projects now being developed.

BACKGROUND

VA's basic mission is to meet the financial, education, and health care needs of American veterans and their dependents. VA operates (1) pension, compensation, and education benefit payment programs, (2) six life insurance programs, and (3) seven loan funds and special accounts programs. VA is the largest independent civilian federal agency; in fiscal year 1983, VA's budget request totaled $28.3 billion. VA runs 172 hospitals, 107 nursing homes, 226 outpatient clinics, and 16 domiciliaries. It also operates 109 national cemeteries.

To discharge its program and administrative responsibilities, VA operates 58 regional offices in addition to its health care facilities and cemeteries, employs more than 204,000 individuals, and is a major user of automated

data processing (ADP) equipment. For fiscal year 1983, VA estimated it would spend about $5.7 billion for salaries and employee benefits. It operates 5 administrationwide computer centers and 169 computer facilities in its hospitals. Overall, VA uses 732 computer central processing units. GAO's work was done during the period of November 1982 and July 1984.

RESULTS IN BRIEF

The financial management systems do not include internal controls made possible by state-of-the-art ADP technology for data entry, telecommunications, and database management. As a result, VA's managers are not getting the reliable financial information they need to effectively carry out and report on the financial aspects of VA's program and administrative operations.

Recognizing its ADP and equipment problems, VA's 5-year ADP and telecommunications plans call for developing 52 major automated system development projects and 5 major procurements of computer and other ADP equipment for an estimated total of $244 million. VA's plans to overhaul its financial management system appear to address most system problems. Because the plans are only in the study and design stage, GAO cannot assess whether the development projects will meet their intended goals. GAO's priority ranking of financial management system development projects should help VA select projects for review. (See chapter 5.)

PRINCIPAL FINDINGS

Of VA's 65 automated systems supporting the four-phase financial management model, 4 relate to the planning and programming phase, 5 to budgeting, 53 to budget execution and accounting, and 3 to audits and evaluations. (See chapter 3.)

Financial Management and Accounting

In its review of the automated flow of information among the 65 systems, GAO observed that:

--VA does not maintain a consolidated agencywide ledger but instead maintains multiple ledgers.

--Systems to support planning for medical facility construction projects do not produce the timely, accurate, and complete information needed to develop effective construction plans.

--Systems to support budget formulation for medical facility construction projects do not produce the information to develop adequate budget estimates.

--Budget development time frames preclude the use of the actual financial results of the preceding year's program and administrative operations in developing budget requests.

--VA's legal obligation to make benefit payments limits actual congressional control over its budget to 43 percent of the budget. For fiscal year 1983, for example, out of VA's total budget request of $28.3 billion, $16 billion represented VA's estimates of resources needed to provide veterans benefits. The $16 billion is only an estimate and not an absolute limit.

Internal Control

VA's financial management systems do not support effective internal control over financial management. (See chapter 3.) For example,

--Systems that authorize and disburse funds and the uses of resources do not include adequate controls to ensure that disbursements and resource use are proper.

--VA's general ADP controls do not support the accurate processing of financial information and the preparation of reliable financial reports.

--Controls over changes to computer programs and other specialized software cannot ensure that only authorized changes are made.

--Tests of new or modified computer programs are not adequate to ensure that programs are implemented as intended in designs or that they function properly.

--Controls over information received for processing through a major automated financial system could not ensure that all information was actually processed.

--Computer center disaster recovery procedures were neither comprehensive or tested periodically to determine and evaluate their effectiveness.

Initiatives to Improve Financial Management

VA's ADP plans for fiscal years 1985-89 include 44 financial management systems projects to (1) develop new and upgrade certain existing computer systems and (2) acquire new computer and other ADP equipment. (See chapter 4.) These efforts are intended to address VA's two major ADP problems:

--Existing applications software is poorly documented, unstructured, and difficult and costly to modify and maintain.

--VA's financial, as well as its other management information systems, are outdated and slow, having been designed around obsolete batch data entry-and-retrieval and sequential processing techniques.

RECOMMENDATIONS

This report provides information only. GAO makes no recommendations on this work.

AGENCY COMMENTS

GAO obtained VA's comments on a draft of this report. VA disagreed with only two issues: (1) with GAO's characterization of the Beneficiary Identification and Records Locator Subsystem as VA's main computerized source of claimant eligibility information and (2) with the need for a VA-wide consolidated general ledger. Details on these comments and our evaluation are presented in the report. (See pp. 34 and 22, respectively.) VA also stated that Cost Accounting System should be classified as a budget execution and accounting system and that the Design Fee Negotiation System should not be classified as a financial management system. GAO agrees, and has revised the report accordingly. Appendix XXI contains VA's comments and GAO's response to each comment.

Contents

TABLES

ABBREVIATIONS

ACS	Automated Allotment Control System
ADA/IRM	Assistant Deputy Administrator for Information Resources Management
ADP	Automated Data Processing
AHIS	Automated Hospital Information System
AMIS	Automated Management Information System
BIRLS	Beneficiary Identification and Records Locator Subsystem
C&P	Compensation and Pension
CALM	Centralized Accounting for Local Management
CARE	Control and Risk Evaluation
CARS	Central Accounts Receivables System
CHAMP-VA	Civilian Health and Medical Program of the Veterans Administration
COMISS	Computerized Medical Information Support System
CORE	The term for implementation phases of DHCP
CP&E	Compensation, Pension, and Education
DOD	Department of Defense
DHCP	Decentralized Hospital Computer Program
DM&S	Department of Medicine and Surgery
DMA	Department of Memorial Affairs
FIPS PUB	Federal Information Processing Standards Publication
FMFIA	Federal Managers' Financial Integrity Act
GAO	General Accounting Office
GRECC	Geriatric Research, Education, and Clinical Centers
GSA	General Services Administration
HBHC	Hospital Base Home Care

IG	Inspector General
IHS	Integrated Hospital System
ITS	Insurance Terminal System
LCC	Life Cycle Cost
MERS	Medical Equipment Reporting System
MIS	Management Information System
ODM&T	Office of Data Management and Telecommunication
OMB	Office of Management and Budget
OPM	Office of Personnel Management
PAID	Personnel and Accounting Integrated Data
REPS	Reinstatement Entitlement Program For Survivors
VA	Veterans Administration
VADS	Veterans Assistance Discharge Systems
VCS	Veterans Canteen Service
VR&C	Vocational Rehabilitation and Counseling
VR&E	Vocational Rehabilitation and Education

APPENDIXES

CHAPTER 1

INTRODUCTION

This profile uses a four-phase financial management model for organizing its presentation of the Veterans Administration's (VA's) financial management function and related systems. With the phases of (1) planning and programming, (2) budgeting, (3) budget execution and accounting, and (4) audits and evaluations, the model includes systems which traditionally would not be considered financial management systems. Some systems included in this profile, for example, report on the number and medical condition of patients treated, hospital construction project requirements and plans, and hospital deficiencies. Such a comprehensive view of financial management systems requires redefining the term internal control as it has been commonly used in financial management.

DEFINITIONS OF "INTERNAL CONTROL" AND "INTERNAL CONTROLS"

"Internal control" and "internal controls" are not used here interchangeably. The term internal control is used in a broad sense to refer to VA's system of procedures to provide evidence that agency policies and procedures are in fact followed. This definition agrees with the Comptroller General's 1983 Standards for Internal Control in the Federal Government which defines internal control systems as:

> "The plan of organization and methods and procedures adopted by management to ensure that resource use is consistent with laws, regulations, and policies; that resources are safeguarded against waste, loss, and misuse; and that reliable data are obtained, maintained, and fairly disclosed in reports."

The term internal controls, on the other hand, is used in a narrower sense to entail individual procedures which provide evidence that agency policy and processing procedures have been followed. In a payroll system, for example, processing procedures for time and attendance records may require that:

--Records must be submitted for computer processing in batches of 100 records.

--Each time-and-attendance batch must include a control showing: (1) number of records in the batch, (2) total number of hours worked as shown on the records in the batch, and (3) the total number of hours of leave taken as shown on the records in the batch.

An internal controls procedure would be a computer-edit check that would reject from further computer processing all batches of time-and-attendance records that did not include a batch control form showing total hours worked and leave taken for all records in the batch.

PROGRAM OVERVIEW

The Veterans Administration (VA) is the largest independent civilian federal agency. The President's fiscal year 1983 budget request included about $28.3 billion in spending authority for VA, which included approximately $5.7 billion for salaries, compensation, and employee benefits for about 204,000 employees. (See app. I.) VA is also a major user of automated data processing (ADP) equipment. (See app. II.) Its ADP systems service a wide range of insurance, loan, medical services, disability, and education benefit programs for eligible veterans and their survivors.

VA's overall mission is to meet the financial, education, and health-care needs of veterans and their dependents and survivors with concern, care, and compassion. VA operates three types of programs to meet veterans' financial and education needs: (1) pension, compensation, and education benefit payment programs, (2) six life insurance programs, and (3) seven loan funds and special accounts programs. To meet the health care needs of veterans and their dependents, it provides medical care through 172 hospitals, 107 nursing homes, 226 outpatient clinics, and 16 domiciliaries. In addition, VA operates a system of 109 national cemeteries located in the noncontiguous United States to provide for the burial of veterans and their eligible dependents.[1]

Disability, burial, and education benefit payment programs

VA through its compensation and pension (C&P) programs, provides (1) pension benefits to eligible veterans with wartime service who satisfy statutory income limitations, (2) disability compensation benefits to veterans who suffered disease or injury while on active military duty, and (3) education benefits to eligible veterans. VA also provides compensation to the survivors of veterans who die of a service-connected cause and need-based pensions to survivors of wartime veterans who do not die of service-connected causes. In addition, VA operates 109 national cemeteries to provide for the proper burial of veterans who were not dishonorably discharged from the military services. VA also provides grants to states to develop veterans' cemeteries.

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[1]VA's Fiscal Year 1986 Budget-In-Brief.

Life insurance programs

VA operates six life insurance programs/funds for veterans. The following table presents the estimated number of policies and amount of insurance in force for the six insurance funds for fiscal year 1983.

Table 1.1
VA Life Insurance Programs

	Number of policies	Insurance in force (thousands)
Service Disabled Veterans Insurance Fund	192,500	$1,741,387
Veterans Reopened Insurance Fund	154,100	1,070,967
Servicemen's Group Life Insurance Fund[a]	-	-
National Life Insurance Fund	3,278,000	22,965,900
United States Government Life Insurance Fund	76,400	304,900
Veterans Special Life Insurance Fund	486,300	4,279,000
Totals	4,187,300	$30,362,154

[a]This fund finances the payment of group life insurance premiums to private insurance companies under the Serviceman's Group Life Insurance Act of 1965, as amended.

VA's $30.4 billion in life insurance in force makes it the equivalent of the 13th largest life insurance company in the United States.

Loan, loan guarantee, and special accounts programs

VA operates seven loan funds and special accounts programs to provide money to veterans to (1) purchase homes, (2) obtain college or vocational training, (3) recover through therapeutic work programs from service-connected injuries, and (4) build an education fund while on active duty with the military services. The following table presents the estimated loan and account values for the seven loan and loan guarantee funds and special accounts for fiscal year 1983.

Table 1.2
Value of VA Loans, Loan Guarantees and Accounts

	(thousands)
Loan Guarantee Revolving Fund	$125,824,774
Direct Loan Revolving Fund	314,106
Educational Loan Fund	54,680
Vocational Rehabilitation Revolving Fund	447
Special Therapeutic and Rehabilitation Activities Fund	2,500
Post Vietnam Era Veterans Education Account	365,099
General Post Fund--National Homes[a]	13,982
Total	$126,575,588

[a]This fund consists of gifts, bequests, and proceeds of sale of property left in the care of VA facilities by former beneficiaries, patient fund balances, and proceeds of effects of beneficiaries who die leaving no heirs or without having disposed of their estates. These funds are used to promote the comfort and welfare of veterans in hospitals, nursing homes, and domiciliaries where no general appropriation is available.

Health care programs

VA is responsible for providing quality medical care to the nation's veterans as well as researching medical conditions that frequently affect veterans, prosthetic devices, and physical rehabilitation. VA provides medical care to veterans for both service-connected and nonservice-connected conditions, of which service-connected injuries and illnesses receive priority. VA also provides medical care to dependents--the Civilian Health and Medical Program of the VA (CHAMP-VA)--of certain disabled or deceased veterans under Public Law 93-82.

To meet its health care responsibilities, VA operates hospitals, outpatient clinics, nursing homes, and domiciliaries[2] and provides medical care to veterans on a fee or contract basis with private health care providers. The following table presents VA's estimates of the number of veterans provided medical care in fiscal year 1983.

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[2]Domiciliaries provide necessary medical and other professional care for eligible ambulatory veterans disabled by age, disease, or injury and needing care but not requiring hospitalization or the skilled services of a nursing home.

Table 1.3
Number of VA Patients Treated, FY83

VA:	
Hospitals	1,250,000
Nursing homes	15,328
Domiciliaries	13,700
Outpatient clinics (medical visits)	16,223,000
Total	17,502,028
Contract Care:	
Hospitals	31,459
Nursing homes	43,742
Outpatient clinics (medical visits)	1,862,000
Total	1,937,201
Grand Total	19,439,229

The operation of a network of hospitals, clinics, nursing homes, and domiciliaries requires the VA to maintain a construction program to rehabilitate and expand existing facilities and to construct new facilities. VA requested $1.1 billion for construction projects for fiscal year 1983.

VA, as part of its health care program, operates the Veterans Canteen Service (VCS). It is a self-sustaining, independent organization within the Veterans Administration which Congress created in 1946 to provide hospitalized veterans with merchandise and personal services. A Veterans Canteen is set up in all 172 VA hospitals.

FISCAL YEAR 1983 FINANCIAL HIGHLIGHTS

Of the President's fiscal year 1983 budget request for about $28.3 billion in spending authority for VA (see app. III), about $2.5 billion was estimated for nonappropriated funds. The nonappropriated funds included about $178 million in sales revenue for the VCS, about $471 million in collection of overpayments made to veterans and their families, and $1.8 billion in receipts generated by VA's six insurance and seven loan and special account funds.

Nine broad program categories accounted for the $28.3 billion budget request. Four VA programs accounted for 93 percent, or about $26.6 billion, as follows: benefit payments, $15.5 billion; life insurance operations, $1.7 billion; medical care, $8.3 billion; and construction projects, $1.1 billion.

VA's statements on financial position for the fiscal years ended September 30, 1982 and September 30, 1983, are presented in appendixes IV and V. Of particular significance with respect to financial statements are unexplained material differences

between fiscal year 1982 and 1983 totals. The statements included in the Treasury Department's bulletins were prepared by Treasury on the basis of information supplied by VA. The statements reported total assets of $27.7 billion and corresponding total liabilities and government equity of $27.7 billion as of September 30, 1982, and total assets of $15.7 billion and corresponding total liabilities and government equity of $15.7 billion as of September 30, 1983[3] for a decrease of about $12 billion (see app. VI).

The $12 billion dollar decrease in assets, liabilities, and government equity included two major items:

--Real Property and Equipment: The statement of financial position for September 30, 1982, includes a total of $5.8 billion for real property and equipment less allowances. The statement for September 30, 1983 shows a total of $760 million for these same assets.

--Unfunded Liabilities: The statement of financial position for September 30, 1982, includes an unfunded liability of $735 million. The statement for September 30, 1983, shows a total of $4 million.

In addition, VA's statement of financial position as of September 30, 1983, as published by Treasury in its bulletins, showed accounts receivable less an allowance for doubtful accounts of $317.2 million. A detailed supporting schedule included in Treasury's bulletins of VA's accounts receivable, however, showed VA accounts receivable as of September 30, 1983, of more than $876 million. Specifically, the supporting schedule showed:

Table 1.4
VA Accounts Receivable, 9/30/83

	(millions)	
Receivables - 9/30/82		$ 871.3
Add: new receivables		440.5
Total		$1,311.8
Less:		
Collections	$400.4	
Reclassified accounts	3.3	
Amounts written off	31.2	$(434.9)
Receivables - 9/30/83		$ 876.9

[3]September 30, 1982, and 1983, data were the most recent information available to us during our review. The September 30, 1983, information was published by Treasury in its March 1984 Treasury Bulletin. September 30, 1984, information was published in the March 1985 Treasury Bulletin.

VA gave no explanation in the financial statements, as published by Treasury, for the significant changes in financial position between September 30, 1982, and September 30, 1983, or for the differences in the amount for accounts receivable reported in its statement of financial position and related detailed supporting schedule for accounts receivable.

In addition to the VA statements of financial position published in Treasury's bulletins, VA presented similar statements in its own annual report. The statements of financial position included in VA's own annual report for fiscal year 1983 showed total assets of $27.1 billion and corresponding total liabilities and government equity of $27.1 billion as of September 30, 1982, and $28 billion as of September 30, 1983. (See app. VII.) These totals differed from related totals in VA's statements included in Treasury's bulletins previously discussed.

The material differences between the September 30, 1982, and September 30, 1983, VA financial statements included in Treasury's bulletins and those in VA's own annual report indicate that VA's accounting systems may not produce and report to Treasury reliable financial information on a consistent basis. The Comptroller General's accounting principles and standards for federal agencies state that the overall goal of federal accounting and reporting is to provide information that is useful in allocating resources and in assessing management's performance and stewardship. These principles and standards further state that accounting information is useful when it is timely, relevant, reliable, cost-beneficial, material, comparable, and consistent.

Federal accounting principles and standards further state that agency financial statements shall result from an accounting and budgeting system that is an integral part of its total financial management system and one that contains sufficient discipline, effective internal control, and reliable data. These principles and standards provide that agency financial statements shall include comparative financial data from the immediate prior year, if applicable, and that data be reported in a format consistent with the current year.

A reconciliation of VA's financial statements, as published in Treasury's bulletins and as included in VA's own annual report, and a reconciliation of both sets of financial statements with VA's accounting records were beyond the scope of this survey. This issue is discussed in further detail in chapter 2 of this financial management profile. (See pp. 21 to 23.)

ORGANIZATIONAL STRUCTURE

VA is headed by an administrator and a deputy administrator. Its Washington, D.C., central office comprises three offices of associate deputy administrators, eight staff offices and three operating departments. A brief description of the structure and mission of VA's organizational components follows.

The offices of associate deputy administrators include:

---Associate Deputy Administrator for Logistics, which includes the offices of (1) Construction, (2) Procurement and Supply, and (3) Administration;

---Associate Deputy Administrator for Information Resources Management, which includes the offices of (1) Reports and Statistics and (2) Data Management and Telecommunications; and

---Associate Deputy Administrator for Congressional and Public Affairs which includes the offices of (1) Congressional Affairs and (2) Public and Consumer Affairs.

The staff offices include:

---Board of Contract Appeals,

---Board of Veterans Appeals,

---Office of General Counsel,

---Inspector General,

---Office of Budget and Finance (Controller),

---Office of Program Planning and Evaluation,

---Office of Personnel and Labor Relations, and

---Office of Equal Opportunity.

The central office provides overall policy and guidance to the three operating departments which provide line supervision over VA programs and oversee the delivery of authorized services to veterans through a number of field offices and installations.

--Department of Medicine and Surgery, under the Chief Medical Director, carries out VA health care programs. In addition, it also researches the major health problems experienced by veterans (Agent Orange-related illnesses, for example) and prosthetics.

--Department of Veterans Benefits, under the Chief Benefits Director, carries out the VA's disability, burial, and education benefit payment programs. The department also manages and operates VA's six life insurance funds and seven loan and loan guarantee funds. It carries out its programs through a network of 58 regional offices located throughout the United States and the Philippines.

--Department of Memorial Affairs, under the Chief Memorial Affairs Director, operates a network of national cemeteries, procures headstones and monuments to mark the graves of veterans and their eligible dependents, and administers a financial assistance program for state-owned veterans' cemeteries.

Four offices in VA's central office are the focal points for financial management issues. An overview of the functions performed by these offices follows.

--The Office of Budget and Finance (Controller) (1) formulates, presents, and executes the VA's budget, (2) maintains the Administration's accounting systems, (3) administratively controls spending authority (appropriated funds), and (4) monitors and recommends improvements to all financial operations.

--The Office of Program Planning and Evaluation reviews overall operations and recommends management improvements. Specifically, this office (1) develops policy, (2) prepares program plans and analyses, (3) works with the Controller in formulating the budget and controlling budget execution, (4) conducts program evaluations, and (5) reviews and evaluates the impact of policy implementation.

--The Associate Deputy Administrator for Information Resources Management (1) oversees the operations of the Office of Data Management and Telecommunications and the Office of Reports and Statistics, (2) is responsible for ensuring that the Paperwork Reduction Act is implemented, (3) develops policies and directives related to ADP and telecommunications systems, (4) provides system development and system operations services to the other organizational components, and (5) operates the Administration's five computer centers.

--The Associate Deputy Administrator for Logistics oversees (1) the operations of the Offices of Construction, Procurement, and Supply and Administration and (2) central office administrative support programs.

OBJECTIVES, SCOPE, AND METHODOLOGY

GAO has developed a model that views the financial management function in terms of four phases. That is, planning and programming, budgeting, budget execution and accounting, and audits and evaluations. Using this model, GAO reviewed the financial management function at VA. Our work included:

--identifying VA's financial systems according to the four phase structure,

--identifying internal control and ADP in selected financial management systems,

--reviewing initiatives for improving financial management, and

--ranking selected system development projects by their importance to supporting financial management at VA.

Reviewing VA as a single financial entity,[4] we examined the operations of the VA's financial management systems in a cross section of its headquarters and field offices. Specifically, we performed work at:

--VA's central office in Washington, D.C.;

--six regional offices: Chicago, Indianapolis, Los Angeles, Milwaukee, Philadelphia, and St. Paul;

--17 medical facilities: Hines, Lakeside, and Westside in Chicago; Cincinnati; Dallas; Indianapolis; Kansas City; Leavenworth, KS.; Lexington, KY.; Loma Linda, CA.; Long Beach, CA.; Los Angeles (West), CA.; Milwaukee (Wood), WI.; Minneapolis; Temple, TX.; San Francisco; and Waco, TX..

--five computer centers: Austin, TX.; Hines, IL.; Los Angeles, CA.; Philadelphia, PA.; and St. Paul, MN..

--Hines, IL. and Somerville, NJ., supply depots.

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[4]The fiscal year 1983 VA budget request information is presented primarily to show the relative financial importance of VA's various program and administrative responsibilities. These relationships have not materially changed from fiscal year 1983 to the present. Fiscal year 1983 information was used because at the time of completion of our review work, it was the most recent fiscal year for which final financial reports on the actual results of program and administrative operations were available.

On the basis of broadly defined financial management controls, we reviewed VA systems that

--support development of plans and programs,

--develop budget requests,

--maintain general ledger accounts and produce financial reports,

--record and control appropriated funds/spending authority,

--record and control assets (cash, accounts receivable, inventories, and personal property),

--authorize disbursement of funds and make the disbursements (procurement, grants, benefit payment, and personnel/payroll systems),

--authorize the use of resources (construction, insurance, and loan program systems),

--determine the cost of operations, and

--support audits and evaluations.

In consonance with GAO's CARE[5] audit approach, we studied VA's programs, organizational structure, and financial resources and its execution of the four phases of the management function, that is, planning and programming, budgeting, budget execution and accounting, and audits and evaluations. We classified financial management systems by phase and identified major internal control weaknesses in selected systems that prevented these systems from operating effectively. Finally, we identified and documented VA's plans to upgrade its financial management systems and related these plans to identified internal control weaknesses.

We based our work on (1) available system documentation, (2) discussions with cognizant accounting, program, and ADP system officials, and (3) prior GAO, VA's Inspector General, and

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[5]CARE stands for Control and Risk Evaluation. GAO's CARE-Based Audit Methodology For Reviewing and Evaluating Agency Accounting and Financial Management Systems was published in final form in July 1985.

special study group reports. We also considered the results of VA's work to comply with the Federal Managers' Financial Integrity Act of 1982[6] and OMB Circular A-123.[7]

We performed our survey in accord with our current Standards for Audit of Governmental Organizations, Programs, Activities, and Functions except that we did not test system operations or information processed by and recorded in these systems. We obtained comments from VA on a draft of this report.

Since VA currently plans a virtual overhaul of its current financial management systems (see ch. 4,) we focused on ranking the VA's system development projects in order of importance rather than ranking its current systems in order of risk. The methodology we used to rank VA's financial management system initiatives is discussed in chapter 5 and appendix VIII. This ranking will be one of the bases for scheduling reviews of system design projects at VA.

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[6]The Federal Managers' Financial Integrity Act of 1982 requires federal agencies to review their systems of accounting and administrative internal controls and to annually report to the President and the Congress on the adequacy of their internal control systems, weaknesses in these systems, and corrective actions that will be taken to correct any weaknesses. The act also requires federal agencies to report annually to the President and Congress whether their accounting system conforms to the Comptroller General's accounting principles and standards.

[7]OMB Circular A-123 prescribes policies and standards to be followed by executive departments and agencies in establishing, maintaining, evaluating, improving, and reporting on internal controls in their program and administrative activities.

CHAPTER 2

VA'S FINANCIAL MANAGEMENT SYSTEM STRUCTURE AND OVERVIEW OF FUND CONTROL

VA operates 65 automated systems to support its managers responsible for carrying out the four phases of financial management. These 65 systems constitute VA's financial management structure, and we classified these systems according to the four phases of the financial management function.

In describing the systems that support VA's execution of the budgeting phase of financial management, we addressed the issues of VA's ability to develop cost-based budget requests within governmentwide budget development time frames and the Congress' ability to control VA's spending authority through the annual appropriations process. Our review showed that:

--VA does not maintain a consolidated agencywide general ledger. Instead, it maintains multiple general ledgers.

--Governmentwide budget development time frames preclude the use of actual financial results of the preceding year's program and administrative operations in developing budget requests.

--Congress can directly control about 43 percent of VA's budget authority through the annual appropriation process.

OVERVIEW OF VA'S FINANCIAL MANAGEMENT SYSTEMS

Out of the 218 automated systems VA operated, we identified 65 systems that support financial management. Of these, 4 support development and plans of programs, 5 support budget formulation and presentation, 53 support budget execution and accounting, and 3 support audits and evaluation. Details on the 65 systems are presented in appendix IX. The interrelationships among these systems -- that is, the flow of information -- is presented graphically in appendix X.

Development of plans and programs

The four VA automated systems that support plan and program development provide analyses of (1) the number of patients treated by VA, the kinds of conditions treated, and the kinds of medical care provided, (2) the amount of bed-patient care provided in VA and non-VA facilities, (3) construction project technical requirements, scope, and 5-year plans, and (4)

deficiencies in VA medical facilities. VA uses this information to formulate VA's construction plans for new medical facilities and to provide the basis for developing budget requests for construction projects. (See apps. IX and X.)

Budget formulation and presentation

The five VA automated systems under the budget formulation and presentation phase provide the following information:

--summary VA-wide information on the financial results of program and administrative operations,

--productivity information by work unit for VA's five administration-wide computer centers,

--program and administrative cost information by VA organizational component and VA-wide,

--obligation and outlay information for construction projects,

--construction project cost estimates,

--medical program cost estimates,

--budget submissions by VA organizational components, and

--review results of the Department of Medicine and Surgery's budget requests and forecasts.

VA's comptroller uses the foregoing information to formulate and present an annual budget request to the Office of Management and Budget (OMB) and the Congress. (See apps. IX and X.)

Budget execution and accounting

Fifty-three VA automated systems capture, record, summarize, and report information on the execution of VA's budget authority and on the financial results of program and administrative operations. To simplify their presentation, we have grouped the 53 systems by the following activities:

--Those systems that maintain general ledger summary financial accounts, produce internal and external financial reports, and provide for administrative control over VA's spending authority to help ensure VA does not exceed congressionally-set spending limits.

--Systems that maintain subsidiary ledger detailed financial accounts and control specific assets, liabilities, receipts, and disbursements.

--Those that authorize the disbursement of funds and use of resources, compute the amount of disbursements, and initiate the issuance of checks.

--Systems that produce special financial reports required by law or regulation.

General ledger and administrative control of funds systems

VA does not have a consolidated general ledger and administrative control of funds system. Instead it operates 14 separate systems to maintain its general ledger summary financial accounts, produce internal and external summary financial reports, and administratively control its appropriated funds. (See apps. IX and X.) An overview of these systems follows.

VA's general ledger and administrative control of funds systems include the:

--Centralized Accounting for Local Management (CALM) Depot System that maintains the general ledger accounts for medical supply depots,

--Centralized Accounting for Local Management (CALM) System that maintains general ledger accounts for VA's administrative expenses--supplies and utilities, for example--and to initiate payments for these expenses,

--General Ledger System that maintains general ledger accounts for veterans' mortgage loan programs,

--Depot Fiscal General Ledger Cost Accounts System that maintains depot cost accounts and prepares journal entries for the General Ledger System,

--Personnel and Accounting Integrated Data (PAID) System, which is VA's central personnel/payroll system, that maintains general ledger payroll cost accounts as well as computes and issues paychecks,

--Centralized Accounting System For Construction Appropriations that maintains general ledger accounts for construction appropriations,

--Summary of Benefit Payments System that maintains general ledger accounts for all VA benefits payment program disbursements,

--Cost Accounting System that records and reports program and administrative cost information by field installations, medical districts, and VA-wide,

--Automated Allotment Control System that records and controls the allotment of appropriated funds to VA's organizational components, and

--Nationwide Trial Balance System that records general ledger account information in the preceding systems and produces a summary general ledger for VA.

In addition to these ten systems, VA operates four others that produce special financial analyses. The Trial Balance-General Ledger System produces a VA-wide general ledger account trial balance. The Statement of Transaction System reconciles information reported to Treasury's Central Accounting System with information recorded in VA's general ledger systems. The Supply Fund Profit and Loss System reports on the financial results of VA supply fund operations. The Interoffice Accounts System produces analyses of spending authority transfers among VA facilities.

Overall, the main financial control function performed by VA's 13 general ledger and administrative control of funds systems is to provide managers with the information needed to avoid obligating funds in excess of available appropriations. Controls over specific assets, liabilities, receipts, and disbursements to avoid fraud, waste, and mismanagement are included in subsidiary ledger, disbursement of funds, and use of resource systems.

Subsidiary ledger systems

VA operates 13 automated systems that maintain detailed subsidiary ledger accounts for assets, liabilities, receipts, and disbursements, which support summary financial information recorded in general ledger accounts. These systems record and report detailed transactions; initiate transactions (collection letters for overdue accounts receivable, for example); and include controls to help prevent theft, loss, or mismanagement of assets, liabilities, receipts, and disbursements. (See apps. IX and X.) A list of these systems follows.

--The Central Accounts Receivable System (CARS) records, manages, and controls accounts receivable resulting from (1) compensation, pension, and education benefit overpayments and (2) defaults by veterans on VA guaranteed loans.

--The Centralized Accounts Receivable On-Line System provides computer terminal access to CARS files.

--The Receivables and Payables System records, manages, and controls accounts receivable and payable related to VA supply fund operations.

--The Automated Pharmacy Information System records and controls drug inventories and uses at selected VA pharmacies.

--The Prosthetics and Sensory Aids System records and controls inventories of prosthetic devices, accessories, and sensory aids stocked by VA prosthetic centers.

--The Integrated Procurement Storage and Distribution System records and controls inventories of expendable supplies and nonexpendable property funded by VA's Supply Fund and other appropriations.

--The Liquidation and Claims System records and controls repayment default or liquidation of loans, and outstanding claims.

--The Portfolio Loan System records and controls VA direct loans to veterans and related collections and repayments.

--The Property Management System records and controls real estate owned by VA because of home-loan defaults by veterans.

--The Insurance System records and controls policies issued to veterans under five VA insurance programs.

--The Reserve for Depreciation System maintains detailed accounts on depreciation of equipment used by VA Supply Fund printing and reproduction activity.

--The Life Cycle Cost (LCC) System maintains detailed subsidiary ledger accounts on depreciation of VA construction projects.

--The Chapter 32 Banking System maintains detailed accounts on cash deposits by active members of the military services and Department of Defense deposits to education account funds.

Disbursement of funds and use of resource systems

VA operates 23 automated systems that authorize the disbursement of funds and use of VA's other resources. These systems cover VA's various benefit-payment systems and include the processing procedures to (1) accept claims for benefits, (2) determine claimants' benefit eligibility, (3) compute benefit-payment amounts, (4) initiate the preparation and issuance of checks by the appropriate Treasury Regional Disbursing Offices, and (5) maintain detailed records on payments made. This category of systems also processes transactions for goods and services received by VA. These systems authorize payments, compute amounts owed, and initiate preparation and issuance of checks by the appropriate Treasury Regional Disbursing Office.

These systems include controls to ensure that benefit payments are made only to entitled persons, that payment amounts or resource use is proper, and that VA's resources are protected from fraud, waste, and mismanagement. (See apps. IX and X.) They are as follows:

--Identification and Automatic Application Dispatch Systems for Veterans Benefits

  --Beneficiary Identification and Records Locator Subsystem (BIRLS)

  --Veterans Assistance Discharge System

--Computation of Benefit Payment Systems

  --Fee Basis Medical and Pharmacy System

  --Reinstatement Entitlement Program for Survivors (Reps) System

  --Compensation and Pension System

  --Education System--Chapter 34/35 Benefits

  --Education System--Chapter 32 Benefits

  --Vocational Rehabilitation and Education (Chapter 31) System

  --Manilla Compensation and Pension Payment System

--Compensation, Pension, and Education On-Line (TARGET) System

--Non-Receipt of Benefit Checks System

--Guaranteed and Insured Loan System

--Veterans Mortgage Life Insurance System

--Use of Resource Systems

--Direct Loan/Loan Guarantee Funds Applied and Provided System

--Card and Paper Order System

--Office of Administration Tracking System

--Wage Automated Generated Evaluation System

--Engineering Management Information System

--Non-Recurring Maintenance Program System

--TARGET Inventory and Maintenance Subsystem

--Tracking Resource Information Management System

--Critical Path Method System

--Consulting and Attending Physicians System

Special financial reports systems

VA operates three automated systems to produce required reports to other federal agencies. (See apps. IX and X.) A list of these systems follows.

--The Utilization Reporting System reports on computer utilization.

--The Federal Assistance Awards System reports quarterly to OMB on VA financial assistance transactions.

--The Utilization and Disposal of Excess/Surplus Personal Property System reports to GSA.

Audits and evaluation systems

Three VA automated systems directly support audits and evaluations of program and administrative operations. (See apps. IX and X.) VA's audits and evaluations systems focus on Department of Medicine and Surgery programs and on certain Department of Memorial Affairs Programs. One system produces cost and productivity information for the Department of Medicine and Surgery and the Department of Memorial Affairs. A second system prepares analyses and provides details on the effect of VA's compensation system on retention rates for physicians. The third system analyzes the effectiveness of medical treatment provided patients through VA's Hospital Based Home Care (HBHC) program.

In discussing the inventory of financial management systems with VA program and other officials, they expressed the view that 11 systems should not be classified as financial management systems. Our different views with VA on the 13 systems is based on the broad definition of financial management used in preparing this profile (see chapter 1) and originally established by GAO in its report Managing the Cost of Government: Building An Effective Financial Management Structure, Volumes 1 and 2 (GAO/AFMD-85-35 and 35-A, February 1985). GAO defines an agency's financial management function as encompassing four phases: planning and programming, budget development and presentation, budget execution and accounting, and audits and evaluations. In consonance with this definition, GAO defines a financial management system as a manual or automated information processing system that provides agency managers with information to help them carry out the four phases of financial management.

The definitions of the financial management function and related systems used in preparing the profile are much broader in scope than the traditional definitions heretofore accepted and used by federal agencies. Consequently, this profile includes systems in the inventory of VA's financial management systems that, under a traditional definition of financial management and related systems, would previously have been classified as management information systems because they processed more than purely financial information. Given the broad definition of financial management used in preparing this profile, we have included in the inventory of financial management systems certain systems that serve both financial management and management information functions. The systems that VA views as non-financial management systems are indicated in appendix IX.

VA'S MULTIPLE GENERAL LEDGER STRUCTURE

As previously discussed, VA maintains several general ledgers rather than a consolidated VA-wide general ledger to summarize information on the status of appropriated funds, assets, and liabilities and the financial results of program and administrative operations. VA's multiple general ledgers are maintained by type of asset, liability, and expenditure, such as the payroll expense general ledger, instead of by organizational component, such as the Department of Medicine and Surgery. Specifically, VA maintains general ledgers for:

--its supply depots for medical supplies,
--administrative expenditures,
--the mortgage and loan programs,
--payroll expenditures,
--construction appropriations, and
--benefit program disbursements.

In addition, VA operates an Insurance System that maintains, for VA's insurance programs, detailed subsidiary ledger accounts and summary general ledger accounts.

To prepare annual financial reports on organizational component and consolidated VA-wide bases, general ledger account balances have to be analyzed to resummarize information from a type of expenditure basis to an organizational component basis. This analysis and resummarization is done largely by computer, but some manual adjustments must be made to the computer-produced information.

Both Treasury and VA in their separate annual statements of VA's financial condition present the information on an organizational component basis. Consequently, the summary financial information in VA's general ledgers must be analyzed and resummarized to satisfy annual financial reporting needs. To accomplish this VA operates two automated systems--the nationwide Consolidated System and the Trial-Balance General Ledger System--which, however, do not completely restructure the information in VA's general ledgers. As a result, some manual adjustments must be made to the information these two systems produce. The restructured financial information is provided to Treasury for inclusion in Treasury's annual consolidated statements for the federal government and is included in VA's own annual reports. VA operates another automated system -- the Statement of Transactions System to reconcile information sent to the Treasury with related information recorded in its general ledgers.

The statements on VA's financial condition published by Treasury as of September 30, 1982, and September 30, 1983, and issued separately in VA's annual report as of September 30, 1983, differed in material respects. It was beyond the scope of this review to undertake a detailed reconciliation of the two sets of financial statements to identify (1) the individual differences in statement line items, (2) the causes for these differences, and (3) the proper line item amounts. VA, however, in evaluating its accounting systems and in related annual reports to the President and Congress under the Federal Managers' Financial Integrity Act of 1982, should address the question of whether financial information produced by its general ledger systems and presented in annual financial reports is adequate.

VA officials stated that differences in fiscal year 1983 financial statements as published in Treasury's bulletin and VA's annual report for that year resulted from Treasury's failure to include VA's All Other Funds statement in its bulletin. Follow-up work on this point disclosed that VA's All Other Funds statement was submitted to Treasury after the due date and as a result was not included in Treasury's bulletin. Since Treasury's bulletins are the federal government's official financial reports, it is important that they be complete and timely and that all agencies provide Treasury with required financial reports on due dates. A consolidated, agencywide general ledger (database), as discussed below, would help VA meet external, agencywide financial reporting requirements in a timely manner.

AGENCY COMMENTS AND OUR EVALUATION

In discussing VA's multiple general ledger structure with VA officials, they said the diverse structure of VA programs and financial managers' needs for program information at specific levels preclude maintaining a consolidated general ledger. They pointed out that VA's Controller prescribes what general ledger accounts are maintained by each system, so agencywide consolidation is attainable. However, for day-to-day operations they felt it is only feasible to account for VA financial operations along program lines. Overall consolidated financial statements for the entire VA would be prepared as they are now for the VA annual reports from the programs' general ledger systems.

In our view, the diverse structure of VA programs and financial managers' information needs do not preclude maintaining a consolidated general ledger. Other federal agencies, with program and financial structures as complex as VA's, have designed and implemented overall financial

databases--consolidated general ledgers--that abstract summary financial information from general ledgers maintained on program lines to develop agencywide summary financial information. These databases produce (1) summary financial reports during a fiscal year and not only at the end of the year to support top management monitoring of operations and decisionmaking and (2) timely agencywide financial reports required by the Treasury Department and other agencies.

GOVERNMENTWIDE BUDGET DEVELOPMENT TIME FRAMES PRECLUDE USING PRIOR-YEAR COSTS IN DEVELOPING BUDGET REQUESTS

Governmentwide budget development time frames prevent VA from using the actual costs of the most recent year in developing budget requests. While VA is developing its budget request for any fiscal year, three separate budgets are simultaneously executed, considered by Congress, and developed. For example, when VA was developing its fiscal 1986 budget request, it was executing its fiscal 1984 appropriations, and Congress was considering VA's fiscal 1985 budget request. The following sequence of events for the 1986 budget request, is illustrative.

VA began to develop the fiscal year 1986 budget request in March 1984 when the VA Comptroller and Office of Program Planning and Evaluation asked VA's organizational components to submit their fiscal year 1986-90 program plans and budget estimates by May. During June, the Offices of Budget and Finance (Controller) and Program Planning and Evaluation review these plans and make preliminary recommendations to the Deputy Administrator. Hearings are held before the Deputy Administrator, who makes preliminary decisions which can be appealed to the Administrator. Final decisions, in the form of program decision memoranda, are issued in July. These decisions form the bases for the development of detailed budget submissions on the program and administrative operations that VA would carry out during Fiscal Year 1986.

In July 1984, VA's Comptroller asked VA's components for their fiscal year 1986 budget requests that would be consolidated and submitted to the Office of Management and Budget (OMB). The requests were due in August and the VA budget request was submitted to OMB in September. During the period September through December, VA held discussions with OMB on its budget request and, as a result, revised the request and submitted a final request to OMB in December. The President's fiscal year 1986 budget message, including VA's request, was sent to the Congress in February 1985.

While VA was developing its budget request for fiscal year 1986, it was still executing its appropriation authority for fiscal year 1984, which ended on September 30, 1984, and had not yet started executing its fiscal 1985 appropriations. In fact, the Congress had not yet approved VA's requested spending authority. The Senate began hearings in March 1984 on VA's budget request for fiscal year 1985. The House of Representatives completed its review of VA's budget request in July. In July, Congress passed VA's fiscal year 1985 appropriation. This final congressional action occurred after VA had completed all substantive work on its fiscal 1986 request.

At the time VA began to develop its fiscal 1986 budget request, the most recent information it had available on actual costs was as of the end of February 1984. Consequently, budget development time frames prevented VA from using the actual costs of the year immediately preceding 1986 in preparing its fiscal year 1986 budget request.

CONGRESSIONAL CONTROL OF VA'S BUDGET AUTHORITY

About 43 percent of VA's budget request for fiscal year 1983 represented planned spending for discretionary activities, that is, for activities whose spending level is determined in large measure by administrative action within the levels established by appropriation acts. On the other hand, about 57 percent of VA's budget request for fiscal year 1983 represented estimates of the amount VA was required to pay for major benefit payment programs, such as pensions and compensation benefits among others. Under these programs, eligibility and payment computation criteria are provided in legislation, and a claimant meeting the eligibility criteria is entitled to payment. Therefore, the actual amount of these expenditures is determined by the number of claimants who meet initial and continuing eligibility criteria and receive benefit payments.

In the President's budget request to Congress for fiscal year 1983, VA requested more than $28 billion in the following categories:

Table 2.1
VA Budget Request, FY '83

	(billions)	(percent)
Estimated pension, compensation, burial, and education benefit payments	$16.0	57
Life insurance programs	1.7	6
Loan, loan guarantee, and special account programs	.9	3
Health care programs	8.1	29
Construction programs	.7	2
General management and operating costs	.7	2
Veterans canteen service[a]	2[a]	1
Totals	$28.3	100

[a]The $.2 billion for Veterans canteen service does not represent a request for appropriated funds because it represents an estimate of the canteen service's revenue funds and expenses from retail operations.

The Congress appropriates funds to VA's life insurance and loan, loan guarantee, and special account funds which form the capital for these funds; they remain available until expended. In operating these funds, VA has to stay within the funds' capital provided by the Congress. The total spending authority for these funds of $2.6 billion consists of $1.5 billion in appropriations and $1.1 billion in nonappropriated funds that are receipts generated by regular insurance and loan operations.

The Congress can control directly through the annual appropriation process the $9.5 billion for health care, construction, and general management and operating costs. This total was the requested spending ceiling submitted by VA to the Congress for approval for carrying out these activities. If the Congress approved, VA would be required to keep obligations and expenditures within the spending ceiling.

The $16 billion for benefit payments was not simply a request for appropriations. Rather, this amount represented the estimated benefit payments that VA would be required to make pursuant to eligibility and payment computation criteria contained in law. The actual amount of money to be expended annually under benefit payment programs is determined by the number of claimants who meet initial and continuing eligibility criteria and receive benefit payments. In short, the obligation to make payments to claimants under benefit payment programs is

not limited by VA's budget and the level of appropriations. Because payments are determined by eligibility and payment computation criteria contained in law, appropriations must be sufficient to fund these payments.

The President and the Congress can change the expenditure levels under benefit payment programs by amending the eligibility and payment computation criteria in laws that authorize these programs. The actual spending for benefit payments, however, will still be determined by the number of eligible claimants who apply for and receive benefit payments based on any amended criteria. As noted earlier, the $200 million contained in the budget for the Veterans Canteen Service is an estimate of the Canteen Service's revenue funds and expenses from retail operations.

FINANCIAL MANAGEMENT SYSTEMS UNDERGOING A MAJOR OVERHAUL

VA's financial management systems are undergoing a major overhaul. During the 5 years from fiscal year 1985 through 1989, 11 key financial management systems will be redesigned and another 23 new financial management systems will be developed (see discussion in chapter 4). The 11 current systems (see app. XI) scheduled for redesign include:

- --four systems that provide major information support for the development of plans and programs, formulation and presentation of VA's budget, and the evaluation of program effectiveness;
- --one system that accounts for $125 billion in loan guarantees and insured loans;
- --one system that maintains eligibility information for veterans and their dependents resulting in more than $24.7 billion in benefit payments;
- --three systems that authorized, accounted for, and controlled more than $19.7 billion in disbursements; and
- --two systems that accounted for and controlled more than $31.2 billion in assets and liabilities.

CHAPTER 3
INTERNAL CONTROL IN SELECTED VA FINANCIAL MANAGEMENT SYSTEMS

Under our broad definition of internal control (see pages 1 and 2), we reviewed key financial management systems that support VA managers in carrying-out the activities in our four phase model of an agency's financial management function, and we reviewed the general ADP controls in place at three of VA's five administration- wide computer centers. Within our review's scope, as discussed in chapter 1, the internal control information presented in this chapter is based on our work and VA's own efforts to review its financial management operations under the requirements of the Federal Managers' Financial Integrity Act of 1982.

INTERNAL CONTROLS IN KEY FINANCIAL MANAGEMENT SYSTEMS

Our review of key financial management systems and related studies indicated that:

--Systems to support plans for medical facility construction projects do not produce the timely, accurate, and complete information needed to develop effective construction plans.

--Systems to support budget formulation for medical facility construction projects need to be improved to fully provide the information needed to develop adequate budget estimates.

--Systems that authorize and actually disburse funds and authorize use of resources do not include adequate controls to ensure that these actions are proper. Specifically, system control weaknesses have resulted in:

  --ineligible persons receiving medical care in VA facilities,

  --erroneous benefit payments being made under the fee basis medical care and compensation, pension, and education benefit programs,

  --improper salary payments to VA employees,

  --uneconomical procurement of supplies--particularly medical supplies,

  --inadequate control over and accountability for drugs, supplies, and personal property, and

--inadequate processing procedures and controls for administrative payments so that duplicate payments have been made and VA has not fully complied with the Prompt Payment Act.

VA recognizes the existence of these problems which were reported in its December 1983 and 1984 reports to the President and Congress prepared pursuant to the Federal Managers' Financial Integrity Act and considered in its ADP and telecommunications plans for fiscal years 1985-89. These plans include system projects to address all the financial management system and control weaknesses, except problems related to administrative payments. VA's system plans are discussed in detail in chapter 4.

Development of Plans For Medical Construction Projects

VA's December 1983 and 1984 reports under the Federal Managers' Financial Integrity Act recognize that its construction program for medical facilities had been reviewed by both internal and external auditors whose reports recommended improvements in the systems for planning and managing the construction program. VA hired a private consulting firm to thoroughly review the systems, procedures, and organizational structure of VA's medical facility construction program focusing mainly on the planning for construction projects and the design and construction of VA medical facilities.

The consultants have structured the review in three phases: phase I--description of VA's current processes and systems to plan, fund, and control construction projects; phase II--analysis of current processes and systems; and phase III--development of recommendations for corrective actions. Phase I has been completed, and based on this work, the consultants made the following observations on VA's processes and systems:

--Responsibilities for planning, budgeting, and reviewing VA construction projects are fragmented among several VA organizational components.

--Among the various medical centers staff participation in construction project planning and design is inconsistent.

--A single, identifiable individual or organizational component at a level below the VA Administrator is not assigned the responsibility for construction projects from start to finish.

--VA organizational components participating in construction projects do not have clearly defined rules.

--A single, easily accessible system and database does not exist for construction projects, so that construction project information is duplicated in several systems increasing the possibility of inconsistent information in the various systems.

--Exchange of information between VA organizational components responsible for construction projects is not comprehensive and timely.

--The scope of a project is not well-established early in the construction process.

--Plans for long-range construction and individual projects are not developed and synchronized with VA's budget formulation process.

--Master, long-range construction plans are not consistently established by VA medical centers.

Formulation of Budget Requests For Construction Projects

VA's reports in December 1983 and 1984 under the Federal Managers' Financial Integrity Act identified three major areas of improvement in formulation of budget requests for medical facility construction projects. First, the delays of up to 18 months that occur between the completion of plans for construction projects and the inclusion of projects funding requests in budgets submitted to OMB and the Congress have resulted in higher project costs. This is because VA cannot have construction begin at the time final plans are made but must wait until the Congress approves the funding. During this time period, construction costs often escalate. To solve this problem, VA, with congressional approval, established in fiscal year 1985, a design fund to permit more prompt starts of construction projects. To further reduce construction costs, VA's fiscal year 1986 appropriation request includes a proposal for a similar fund to permit the development of selected projects based on architect and engineer working drawings to further reduce construction costs.

Second, each VA nursing home facility previously was individually designed and constructed so the costs per facility were different. VA developed designs for two standard nursing homes: 60- and 120-bed facilities. These standard designs should keep costs to a practicable minimum by reducing design and construction costs for individual facilities. VA is extending this initiative to determine the feasibility of automating the two standard nursing home designs through the use of a computer-assisted design system. In September 1984, VA

issued a contract to a private architect/engineering firm to put the standard nursing home designs on a computer-assisted design system.

Third, until now, technical assessments of the physical condition of specific buildings within the VA system have been conducted either by the facility staff in formulating their five-year plan or when specific technical program areas became a matter of concern. The Capital Facilities Study is the first centrally-directed technical assessment of a large number of VA medical facilities at one time. This survey of approximately 135 VA medical facilities built prior to 1970 will establish an information base that can be used for future construction planning. This survey will be conducted by 18 private architect/engineering firms under separate contracts with the VA. All contracts were awarded during fiscal year 1984 with the work scheduled to continue into early fiscal year 1986.

Budget Execution and Accounting Systems

VA's systems authorizing and making disbursements of funds and authorizing use of resources appear to lack needed processing procedures and controls to adequately ensure proper disbursements of funds and uses of resources. We focused on systems that support VA's programs of medical care, compensation, pension, and education benefit payments; its personnel/payroll and administrative payments functions; procurement of medical supply operations; and accountability and controls for personal property.

Because the VA automated budget execution and accounting systems selected for review include many manual procedures and controls that authorize disbursements and uses of funds, we focused on manual procedures more heavily than on the automated processing steps in these systems. Specifically, our review of procedures and controls focused on:

--authorizing medical care for veterans in VA hospitals and outpatient clinics;

--authorizing medical care for veterans through private health care providers who work with VA on a fee and contract basis;

--authorizing compensation, pension, and education benefit payments to veterans;

--collecting money owed VA by (1) insurance carriers, (2) recipients of reimbursable medical care, and (3) individual veterans who were overpaid under VA's compensation, pension, and education program;

--authorizing and making payments for salaries to VA employees, for medical supplies, and administrative costs; and

--accounting for and controlling personal property.

Authorizing medical care in VA hospitals and outpatient clinics

According to our work and reviews by GAO and VA's Inspector General (1) ineligible persons receive medical care in VA facilities and (2) VA does not always recover the cost of medical care provided to ineligible individuals. These conditions happen because (1) VA's central system for establishing individuals' eligibility for VA medical care--the Beneficiary Identification and Records Locator Subsystem (BIRLS)--does not report complete, accurate, and timely information, and (2) VA medical facilities have not established procedures to obtain cost reimbursements where it is appropriate. As a result, VA has spent millions of dollars to provide health care to ineligible individuals.

In July 1981 we reported[8] that VA did not deny medical care to persons pending positive determinations of entitlement to VA benefits and as a result provided medical care to ineligible individuals. The report further stated that once VA determined that it had provided medical care to ineligible individuals it did not effectively bill and attempt to recover all the cost of care provided. In cases where VA did attempt to recover the cost of care, it was not fully successful. For example, the report pointed out that over a 27-month period VA attempted to collect $15 million, but it only collected $1.2 million of this amount and wrote off $6.5 million as uncollectible.

In a September 1983 report, VA's Inspector General reported that nine medical facilities incurred about $99 million in costs annually to treat ineligible persons through their outpatient clinics. In our review of 17 VA medical centers we focused on 7 centers' systems to bill and collect the costs of medical care provided to ineligible individuals. VA has the opportunity to recover costs of medical care provided veterans when the care was, for example, for a work-related injury or an automobile accident or when the veteran was subsequently determined not to be eligible for care for reasons such as not being a veteran. Five of these seven medical facilities lacked procedures to identify cases in which the veteran had private health insurance

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[8]Cost of VA Medical Care to Ineligible Persons is High and Difficult to Recover, GAO/HRD 81-77, July 2, 1981.

or was involved in an automobile accident or was injured on the job. In such cases VA may be able to recover the cost of care provided. Two hospitals had such procedures in place.

BIRLS is VA's central automated file of individual veterans' eligibility information for VA's benefit programs and services. It maintains automated files for individual veterans that contain, among other things, information on verified military service, current income status, and VA benefits applied for and received. The problems with BIRLS are that (1) the information in its files is incomplete and (2) the information cannot be promptly retrieved and sent to VA medical facilities to support eligibility determinations for individuals for medical care.

BIRLS became operational in 1972, and at that time records were created in its files for veterans who had applied for and received VA benefits. Starting in January 1973, BIRLS was routinely updated with military service information provided by DOD for all persons discharged from the armed services. However, it was not until 1975 that BIRLS' files were expanded to include information on the nature of an individual's separation from the armed services--that is, an honorable, general, or dishonorable discharge, reason for separation, or other information on administrative decisions. Consequently, the BIRLS files are incomplete and cannot fully support eligibility determinations for individuals requesting treatment in VA medical facilities.

BIRLS is designed and operated based on out-dated batch processing, sequential file ADP techniques, and as a result, medical facilities must wait for the Austin, Tex. computer center, where BIRLS is run, to send eligibility information.[9] This can take days. During this time, the medical facility must decide whether to treat the veteran immediately or wait until the eligibility information arrives. In many circumstances, the medical facility opts to initiate treatment immediately.

VA's ADP and telecommunications plans for fiscal years 1985-89 include a project to redesign BIRLS to (1) expand the amount of eligibility information recorded for individual veterans, (2) use modern database management techniques to maintain files more efficiently, and (3) use modern computer terminals and telecommunications facilities to send information

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[9]In commenting on the profile, VA stated that it plans to link its medical facilities by communications lines to BIRLS during fiscal year 1986. Giving the medical facilities access to BIRLS via communications lines should result in medical centers receiving information from BIRLS in about 30 seconds.

to users--in this case VA medical facilities. These plans also call for replacing the current computer equipment used to run BIRLS with high-speed computers. These plans concentrate on getting veteran eligibility information to users promptly. Details are presented in chapter 4.

In addition to the problem of incomplete and untimely information from BIRLS, five of the seven VA medical centers, at which we focused on their systems to bill and collect cost of care, did not have procedures to (1) determine whether a veteran has health insurance or was involved in an automobile accident or sustained a work-related injury, and (2) initiate collection action when opportunities exist to recover the cost of care. Since December 1982, VA policy has required each VA medical center to establish procedures to recover the cost of medical care provided to a veteran when treatment is for a work-related injury or illness or for an injury sustained in an automobile accident. Five medical centers we visited had not established such procedures and controls.

VA possibly could recover the cost of medical care whenever a veteran is treated for a nonservice-connected condition such as an automobile accident or a work-related injury or illness. However, for these cases, all but two of the medical centers we visited did not establish an accounts receivable or initiate collection action with the appropriate insurance company when the patient was discharged. At these centers, receivables were established and collection actions initiated only after VA received requests for medical records because of a legal action started by private insurance companies. However, VA should be able to recover medical care costs from the insurance companies in certain cases even though litigation is not involved.

In discussing the operations of BIRLS with VA officials, they stated that BIRLS is not VA's main system for supporting decisions on the eligibility of a claimant for benefits. Officials told us that VA's main sources of eligibility information are the hard copy claims and insurance folders for individual claimants. The functions of BIRLS are to provide:

--information to the departments of Medicine and Surgery, Veterans Benefits, and Memorial Affairs to corroborate certain eligibility information provided by claimants for benefits who were discharged from active military service after 1974, and

--identify the VA office and location that has custody of the individual claimant's claims and/or insurance folders.

VA officials told us that BIRLS will (1) confirm whether a claimant for VA benefits served in the armed forces, (2) show whether a claimant is currently receiving or has received in the past VA education, compensation, pension, or insurance benefits, (3) provide certain information on a claimant's military service and VA benefit status, (4) show the claimant's VA identification number, and (5) provide the location of the claimant's hard copy claims and/or insurance folder. VA officials also told us that BIRLS was not designed to be a computerized source of eligibility data.

Agency comments and our evaluation

In commenting on the profile, VA stated that they willingly concede that BIRLS is a computerized source of claimant eligibility information but that they do not agree that BIRLS is VA's main source of eligibility information. VA states that the military service data contained in BIRLS is only one element that goes into an eligibility determination and that, depending on the type of benefit, there are always one or more eligibility factors that are of equal weight in determining whether a benefit may be granted. These other factors such as disability, dependency, and income status do not appear in BIRLS. In addition, BIRLS includes indicators on other VA benefits a claimant has received but not detailed information on these benefits. Overall, VA contends that its hard copy claims folders are the main source of claimant eligibility information for VA benefits and not BIRLS.

We disagree with VA's contention that BIRLS was not designed to be VA's chief automated source of claimant eligibility information because (1) BIRLS and its related VADS system were designed to record the nature of discharges for all personnel released from the military services since 1975 and (2) BIRLS provides VA regional offices and medical centers with the location of hard copy claimants folders.

Military discharge information is the key item of claimant eligibility information, especially in cases of a claimant's first contract with VA. The nature of a claimant's discharge from the military services will determine which VA benefit programs he or she is entitled to participate in. The location of a claimant's hard copy claims/folder in BIRLS is also key because it is the means by which a VA regional office or medical center can obtain the detailed eligibility information in a claimant's claims folder. If the claims folder location in BIRLS is incorrect, the detailed eligibility information in the claims folder will not be available to the VA office requiring it. While BIRLS does not contain detailed claimant eligibility information, it is the conduit for obtaining the information.

As pointed-out on page 41 of this profile, the BIRLS Subsystem became operational in 1972, and at that time records were created in the subsystem's files for claimants who had applied for and received VA benefits. Starting in January 1973, the BIRLS Subsystem was routinely updated with military service information provided by the Department of Defense for all persons discharged from the armed services via VA's automated Veterans Assistance Discharge System (VADS), and in 1975 BIRLS files were expanded to include information on the nature of an individual's separation from the armed services--that is, an honorable, general, or dishonorable discharge, reason for separation, or other information on administrative decisions. These actions, in our opinion, show that VA intends BIRLS to be a computerized source of eligibility information.

Further, BIRLS is the source of information on the physical location of an individual claimant's hard copy claims and/or insurance files for decisionmakers in VA's departments of Medicine and Surgery, Veterans Benefits, and Memorial Affairs. If the file location information in the BIRLS is incorrect, then these decisionmakers will not have timely information to corroborate claimant-supplied eligibility information.

Currently, BIRLS does not function as a computerized source of eligibility information. The reason for this is because many current claimants for VA benefits were discharged from the armed services prior to 1973, and as a result, BIRLS will not always have eligibility information for these claimants in its files. BIRLS will have eligibility information in its files for certain claimants discharged from the armed services prior to 1973 if they have applied for benefits such as education and mortgage benefits. However, as claimants discharged from the armed services after 1973, start applying for VA benefits, BIRLS will be able to function as a computerized source of eligibility information.

Authorizing medical care on a fee or contract basis

Several GAO[10] and VA Inspector General reports have reported on weaknesses in VA's procedures, systems, and controls that authorize and pay for medical care provided to veterans by private health care providers under fee and contract arrangements with VA. Weaknesses in the fee basis program were

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[10]VA Needs Better Control Over Its Payments To Private Health Care Providers, GAO/HRD-85-49, August 28, 1985; and Opportunities To Reduce Fee Basis Pharmacy Costs, GAO/HRD-83-83, September 27, 1983.

covered in December 1983 in VA reports prepared under the Federal Managers' Financial Integrity Act. Procedural, system, and control weaknesses have resulted in

--paying for health care for ineligible persons,
--paying twice for the same care,
--paying excessive fees for care,
--authorizing unnecessary health care, and
--paying for health care not provided.

VA's December 1984 report prepared pursuant to the Federal Managers' Financial Integrity Act stated that the Department of Medical and Surgery published its Circular 10-83-180 ("Use of Public and Private Hospitals in the 48 Contiguous States") in October 1983. This circular identifies areas where medical centers should monitor the hospital program and also identifies areas where specific attention should be focused. VA also finalized a regulation in April 1984 which places limitations on the payment or reimbursement of the costs of emergency hospital care and medical services not previously authorized. VA believes this regulation provides the Department of Medicine and Surgery with the mechanism to control the contract hospital program.

VA makes health care services available to veterans through private health care providers when a veteran eligible for VA provided health care (1) does not live near a VA medical facility, or (2) needed health care cannot be provided by the VA medical facility nearest the veteran's home. VA pays private health care providers for outpatient medical, pharmacy, inpatient medical, nursing home, and dental care provided to eligible veterans. In fiscal 1983, under the fee basis program, VA paid about $425 million to private health care providers.

In his semiannual report dated September 30, 1984, the VA Inspector General stated that during fiscal year 1983, 78 VA clinics provided 249,000 veterans with fee basis outpatient medical care costing about $89 million. This cost covered about 1.7 million visits. The Inspector General estimated that improved policies, directives, and funding controls could reduce expenditures under the fee basis program by $24 million.

Basic internal controls over the fee basis medical care program reside or should reside in three VA automated systems that support the program's operations--BIRLS, the Fee Basis

System, and the Centralized Accounting for Local Management (CALM) System. Specifically,

--The BIRLS is used to obtain information on an individual veteran's eligibility for VA-provided medical care and for the fee basis program. The instances of receiving inaccurate and incomplete information in the BIRLS files have contributed to ineligible individuals receiving VA-provided medical care. This problem with BIRLS also contributes to the incidence of ineligible individuals being served under VA's fee basis program.

--The Fee Basis System supports day-to-day operations of the fee basis medical care programs. It maintains detailed records on fee-basis medical approvals for veterans, accepts bills from health care providers, records manually computer payment amounts, and prepares and sends a payment transactions magnetic tape to the CALM System. This system annually processes about 2 million transactions related to outpatient visits and about 750,000 prescriptions. Like BIRLS, the Fee Basis System's design and operation is based on outdated batch processing and sequential file techniques; getting information into and out of the system promptly and accurately is a problem. Specifically, the data entry and retrieval techniques used by the Fee Basis System are labor-intensive and inefficient. As a result improper payments have been authorized and paid to private health care providers. VA's ADP and telecommunications plan for fiscal years 1985-89, includes projects to upgrade the Fee Basis System with computer terminals that would speed up information entry and retrieval.

--The CALM System accepts from the Fee Basis System a payment transactions magnetic tape, updates the general ledger financial control accounts for the fee basis program, and prepares and sends a final check issue magnetic tape to the appropriate Treasury Department regional disbursing office that prepares and issues checks to the appropriate health care providers.

VA stated that (1) computer edits in the Fee Basis System have been strengthened and (2) an automated information exchange system is being implemented. According to VA, both projects, when fully implemented, should correct the weaknesses discussed in the profile in providing medical care to ineligible persons in VA medical centers and under VA's fee basis medical care program. Specifically:

--Tighter computer edits of transaction information were put into the automated Fee Basis System to (1) ensure

that a veteran is on the system's masterfile before authorizing a payment to a health care provider, (2) reject a request for payment from a health care provider if the request is made after the period of time a veteran is eligible for fee-basis medical care, (3) permit an individual veteran to receive fee basis medical care through only one VA clinic at a time, and (4) reject a request for payment from a health care provider received after a veteran's date of death as reported to the Fee Basis System by BIRLS.

--An automated Department of Medicine & Surgery/Department of Veterans Benefits/Department of Memorial Affairs Information Exchange Project is currently being implemented to (1) automate the exchange of information between the three departments, (2) speed-up getting claimant eligibility information as VA medical centers, and (3) automate the processing of certain Department of Medicine and Surgery and Department of Veterans Benefits hard copy forms between VA's 58 regional offices and its 172 medical centers.

--VA plans to expand and integrate the Fee Bases System with the Decentralized Hospital Computer Program (DHCP) (see pp. 74 to 80) and contends that this will facilitate greater financial control and program management at both field and VA Headquarters levels.

If these two initiatives are fully implemented as intended and if they operate as designed, they should contribute to reducing the incidence of providing medical care to ineligible individuals. Until these two initiatives are fully operational, we cannot evaluate whether they will, in fact, reduce the number of ineligible individuals receiving medical care.

Authorization of compensation, pension and education benefit payments to veterans

Numerous GAO[11] and Inspector General reports have covered serious problems in the manual procedures, automated systems, and internal controls supporting VA compensation, pension, and education benefit payment programs. The problems have resulted in many overpayments to veterans and their dependents. For fiscal year 1983, in which VA requested more than $15.5 billion in spending authority for these programs, accounts receivable due VA resulting from program overpayments totaled more than $876 million on September 30, 1983. In its December 1983 reports prepared under the Federal Managers' Financial Integrity Act, VA recognized that it had serious system and internal control problems in its compensation, pension, and education benefit payment programs.

The three causes of the overpayments under these programs are:

--improper initial eligibility decisions for veterans and their dependents and survivors who apply for benefits resulting from weaknesses in manual processing procedures when applications for new or revised benefits are received and from weaknesses in BIRLS,

--errors in computing benefit payment amounts that stem from design, operation, and internal control weaknesses

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[11] VA Can Reduce Excess Disability Payments By Improving Pay Debt Exchange With Military Services, GAO/HRD-85-39, May 5, 1985; VA's Program To Authorize Courses For Veterans Needs Improved Management, GAO/IMTEC-84-6, October 20, 1983; VA Can Reduce Disability Payments By Ensuring That Veterans Receive Scheduled Reexaminations, GAO/HRD-84-14, December 8, 1983; Dual Compensation Is Paid When Military Reservists Do Not Waive VA Disability Benefits, GAO/HRD-84-13, November 18, 1983; Military Services and VA Can Reduce Benefit Overpayments by Improving Exchange of Pay Data, GAO/AFMD-83-39, July 12, 1983; Veterans Administration's Practices For Allowing Educational Benefit Payments For Courses Not Successfully Completed, GAO/HRD-83-47, May 5, 1983; VA Denver Regional Office Need An Improved Claims Processing Monitoring System To Speed Up Service to Veterans, GAO/HRD-82-45, March 15, 1982; and VA Claims Processing Improvements Can and Is Improving Productivity, GAO/AFMD-82-86, July 13, 1982.

in VA's Automated Compensation and Pension System[12] and education benefit payment systems,[13] and

--failures by veterans and their dependents to inform VA of changes primarily involving income, marital status, and school attendance, that affect their continued eligibility for benefit payments.

VA's compensation, pension, and education benefit payment programs are administered through VA's network of 58 regional offices. Veterans, their dependents, and their survivors file at a regional office initial claims for benefits and changes in eligibility information. Regional office staff are responsible for ensuring that claimants' information is complete and accurate, making initial eligibility determinations, and entering the claimant information into BIRLS, Compensation, Pension and Education on-line (TARGET) systems.

Regional office staff use the information supplied by claimants, information in a claimant's hard copy claims folder in cases where a claimant has previously applied for VA benefits, and BIRLS to make initial eligibility determinations. The claimant information may not always be complete and accurate. VA's experience shows that in some cases claimants understate other income they receive from the Social Security Administration and other pension plans when they apply for VA pension benefits. In claims for education benefits, information supplied by schools about a veteran's attendance may be inaccurate. In addition, BIRLS is used to obtain information on a claimant's military service and locate the claimant's hard copy file folder.

In cases where a claimant applies for VA benefits for the first time or where the claimant's hard copy claims folder cannot be located, the regional office staff must rely on BIRLS to corroborate claimant-supplied eligibility information. Since the BIRLS subsystem's files are incomplete and does not provide

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[13]The education benefits payment system includes Education On-Line (Target), Education Chapter 34/35, and Chapter 32 benefits payment systems and the Vocational and Rehabilitation Education (Chapter 31) System.

[12]The Compensation and Pension System includes the Compensation, Pension and Education On-Line (Target) System, the Compensation and Pension Benefits Payment System, the Manilla Compensation and Pension Payment System, and the Reinstatement Entitlement Program For Survivors System.

information rapidly, regional office staff often do not have information available from an independent source to corroborate eligibility information supplied by claimants. Consequently, many awards for compensation, pension, and education benefits are based on incomplete and inaccurate eligibility information that results in overpayments.

After regional office staff make initial eligibility decisions, the information needed to support the amount of the benefit payment is entered into the appropriate VA compensation, pension, or education system. The system which audits the amount of benefit payment and disburses benefit payments, totaling about $13 billion annually, was initially installed in the 1950's, has been modified many times, including a major redesign in 1978, and is not documented. In addition, staff expertise about the system's operation is dwindling because experienced programmers have left the agency. As a result, VA does not completely understand how the system actually processes information and has difficulty maintaining it. Consequently, VA cannot ascertain the accuracy of individual benefit payment amounts computed by the system.

After a veteran is deemed eligible for and receives benefit payments, the veteran is required to report to VA changes in his or her eligibility for continued benefits. These changes can include an increase or decrease in other income, or changes in school attendance, or both. VA experience shows that veterans do not always voluntarily report changes in their eligibility for compensation, pension, and education benefit payments. Three comparisons of income information supplied by VA benefit payment recipients were made with income information from states and the Social Security Administration. VA's IG made two matches and we made the other. These matches disclosed overpayments involving compensation, pension, and education benefits of $8.5 million, $7 million, and $1.5 million respectively.

BIRLS and the compensation, pension, and education systems are scheduled for redesign during the 5-year period, fiscal years 1985-89. The plans for the Compensation and Pension System call for 11 separate efforts focused on different subsystems in the overall system. Details are presented in chapter 4.

Collecting amounts owed VA

During fiscal years 1982 and 1983, VA strengthened its accounts receivable systems and debt collection procedures considerably. Two areas, however, still need improvement:

--prompt identification and recording of accounts receivable by VA medical centers, and

--assessment of interest charges on all overdue accounts receivable to encourage debtors to pay amounts owed.

Accounts receivable are generated by (1) overpayments to individuals who receive benefits under the compensation, pension, and education benefits programs, (2) failures to recover the cost of medical care where opportunities exist to recover this cost, and (3) veteran loan defaults. VA is entitled to recover the costs of medical care for a veteran with a nonservice connected injury or illness if (1) the veteran is able to pay and/or is covered by private health insurance which does not exclude VA as an eligible provider of medical services or (2) the care of the veteran should be paid for by a third party--for example, private insurance covering a veteran injured in an automobile accident or workers' compensation insurance for a work-related injury or illness.[14]

We estimate VA currently collects about $15 million a year for medical care provided to veterans, their dependents, and military retirees. In December 1982, VA issued an order that requires each VA medical center to establish systems, procedures, and controls to identify, bill, and collect the costs of caring for a veteran with a nonservice--connected condition when the costs can be recovered from a third party. In this regard GAO issued a report in June 1982[15] which pointed out VA medical facilities were not recovering the cost of medical services from workers compensation insurance in cases involving a work-related injury or illness.

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[14]GAO issued a report in February 1985 recommending that the Congress pass legislation to enable VA to recover the costs of non-service-connected care provided to privately insured veterans: Legislation To Authorize VA Recoveries From Private Health Insurance would Result In Substantial Savings, GAO/HRD-85-24, February 26, 1985. GAO issued two other reports dealing with recovering the costs of medical care: Timely Establishment of Medical Recovery Rates Could Increase Recoveries, GAO/HRD-84-32, February 13, 1984 and Opportunities To Increase VA Medical Care Cost Recovers, GAO/HRD-84-31, February 13, 1984.

[15]Stronger VA and DOD Actions Needed to Recover Costs of Medical Services To Persons With Work Related Injuries or Illnesses,GAO/HRD-82-49, June 4, 1982.

As part of our survey we made a limited follow-up of VA's efforts to implement the December 1982 order at seven VA medical centers. Only two of these centers had systems procedures and controls in place that would routinely identify cases in which medical care cost could be recovered from an insurance carrier. One of these two centers recovered $716,000 from insurance carriers in a recent 18-month period.

Several VA Inspector General reports have also noted the potential for recovering substantial amounts for medical care costs related to care provided veterans' dependents and military retirees. These reports noted the medical centers reviewed did not routinely record, bill, and collect for reimbursable medical care. In Inspector General said one medical center failed to recover about $2 million in the cost of renal dialysis services provided to veterans' dependents and military retirees because it did not identify, record, or bill for the cost of this care.

Accounts receivable arising from overpayments to veterans under VA's compensation, pension, and education benefit payment programs in those cases in which benefit payments have terminated and from loan defaults by veterans are recorded in VA's Automated Central Accounts Receivable System (CARS). In cases where overpaid claimants are still receiving benefits or are deceased, records relating to the accounts receivable are maintained in the responsible VA regional office. In addition, accounts receivable arising from reimbursable medical care are not recorded in CARS. Instead, these receivable records, if they exist, are maintained in the individual VA medical centers. The decentralization of this information does not permit VA adequate control over accounts receivable generated by certain overpayments to VA beneficiaries and by providing reimbursable medical care.

VA is required by 38 U.S.C. §3115 to charge interest on amounts due the United States resulting from a person's participation in a VA benefits program, the provision of care or services, and in some cases loan defaults. VA is also required to charge, as administrative costs, the costs incurred in collecting the amount owed. With one exception, not until 1983 did VA begin charging interest and administrative collection costs on overdue receivables it collected that arose from overpayments of education benefit payments (exception: Chapter 31 benefits from the Vocational Rehabilitation and Education System). VA, however, still does not assess interest and administrative collection costs on other overdue receivables arising from overpayments of compensation and pension benefits, loan defaults, and reimbursable medical care.

VA's ADP telecommunications plans for the fiscal year 1985-89 include a project to redesign CARS to strengthen VA's accountability for, control over, and collection of accounts receivable. Details are presented in chapter 4.

Authorizing and making salary payments to VA employees

Our survey of the operation of VA's central personnel/payroll system--PAID--focused on time and attendance procedures in selected VA medical centers. We noted weaknesses in these procedures which could result in the use of erroneous time and attendance information to compute and issue paychecks and, consequently, to overpay employees. Also, a VA test of time and attendance reports and related paycheck amounts disclosed erroneous time and attendance information and incorrect computation of pay.

Our observations of time and attendance procedures in the VA medical centers we visited included procedural weaknesses that involved:

--failures of timekeepers to properly credit and charge sick and annual leave on individual time cards, and

--improper supervisory certification on time cards for overtime, absences, and split-shift hours of duty.

Under its continuing efforts to implement the Federal Managers' Financial Integrity Act, VA confirmed the procedural weaknesses in time and attendance record keeping observed by us during our survey. For example, VA sampled time cards and payroll records as part of their second year efforts under the Financial Integrity Act and noted that time cards sampled included erroneous time and attendance information, and that employees' pay was incorrectly computed. VA used attribute sampling techniques to perform this test. While the results of the sample were not statistically significant, they did indicate that VA has continuing problems with procedures used to compute employees pay and corrective action is needed. Consequently, as discussed in Chapter 4, VA plans to redesign PAID to enhance processing procedures and controls and to provide major system users better information.

Authorizing and making payments for medical supplies

Our August 1982 report entitled, VA Should Use Economic Order Principles in The Wholesale Supply System, (GAO/PLRD-82-108), said VA could save about $5 million annually

of the total cost of ordering and carrying medical supplies, and reduce its inventory investment by $35 million by applying economic order quantity principles at the wholesale level. The report also pointed out that by applying these principles VA could reduce its needs for warehouse space. In October 1983, VA concurred in our report's recommendations and implemented them.

VA covered this issue in its December 1983 report prepared under the Federal Managers' Financial Integrity Act. In addition, VA's ADP and telecommunications plans for fiscal year 1985-89, includes a project to develop an automated procurement system for the Department of Medicine and Surgery. This system will provide for improved procurement of, accountability for, and control over medical supplies. Details are presented in chapter 4.

Authorizing and making payments for administrative costs

Our survey indicated that VA's CALM System which authorizes and makes payments for VA's administrative expenses has serious processing and internal control problems resulting in:

--late payments to vendors so that VA has not fully complied with the Prompt Payment Act,

--duplicate payments to vendors, and

--certain vendors refusing to do business with VA except on a cash basis.

VA recognized the weaknesses in the CALM System in December 1983 and 1984 in its reports prepared under the Federal Managers' Financial Integrity Act.

Through the CALM System, VA authorizes, accounts for, controls, and pays for administrative expenses including procurements of medical, supply fund, and general operating supplies for VA medical centers, regional offices, and central office. During fiscal 1983, the CALM System processed about 6.1 million invoices and paid about $2.5 billion to vendors.

CALM System processing is initiated by VA employees in its various offices and field installations by sending purchase orders, receiving reports, and approved vendor invoices to the VA's computer center in Austin, Tex. for processing through the CALM System. The CALM System is designed to post information from purchase orders, receiving reports, and vendor invoices to its files and to pay vendors through the appropriate Treasury Regional Disbursing Office. The CALM System is not designed to

match purchase orders, receiving reports, and vendor invoices. These matches are manually done by staff at the VA Austin Payment Center. VA officials told us that a project is underway to automate the manual matching process.

By observing the processing of CALM System transactions at selected VA medical centers we noted the following procedural weaknesses:

--Medical centers' financial management personnel do not preaudit disbursement vouchers and the supporting documentation (purchase orders, receiving reports, and vendor invoices) sent to the Austin computer center, so receiving reports do not always match corresponding invoices and purchase orders, and, as a result, payments to vendors are delayed.[16]

--Photocopies of purchase orders, receiving reports, and vendor invoices are sent to the Austin computer center for processing when partial shipments are received from vendors on a purchase order. When the vendor completes delivery on a purchase order, original copies of these documents are again sent to the Austin computer center. Sometimes, the second set of documentation is not annotated to indicate the vendor has already received partial payment, so consequently, the vendor will get a duplicate payment.

The procedural weaknesses noted at VA medical centers have resulted in late and duplicate payments to vendors, the loss of payment discounts for timely or early payment, and late payment penalties. Specifically:

--VA generally pays vendors after their billing cycles so many vendors send second invoices, statements of account, and payment inquiries to VA.

--VA lost about $413,000 in payment discounts in fiscal year 1983.

--Late payment and interest penalties totaling about $88,500 were incurred by VA in fiscal year 1983.

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[16]VA officials told us that when the CALM Systems is fully implemented at VA Medical Centers, vendors will send their invoices directly to VA's Austin Payment Center, and Medical Centers will send receiving reports to the Austin Center as soon as goods and services are received. Personnel in the Austin Center will be responsible for matching invoices with receiving reports.

--A recent study of CALM System operations by VA shows that duplicate payments are made to vendors because (1) photo copies of invoices are used to support payments to vendors on partial shipments and (2) VA medical centers use duplicate invoices to support payments to vendors.

Further, in its December 1984 report prepared pursuant to the Federal Managers' Financial Integrity Act, VA reported that weaknesses in the CALM system resulted in:

--economical prompt payment discounts not being taken,

--payments not being made timely and as a result VA is in violation of the Prompt Payment Act,

--control accounts not being reconciled to source documents,

--excessive agent cashier advances being held at four field facilities,*

--excessive travel advances being made to some employees,*

--a $225,000 renovation project being incorrectly charged to expired rather than current year appropriation,*

--procedures to record, maintain and collect accounts receivable and credit memos being deficient,

--lack of segregation of duties relating to collections and follow-up on delinquent accounts, and

--undelivered orders on accrued services payable not being reviewed for possible deobligation of funds.

Overall, VA reported that the CALM system includes significant areas of nonconformance with the Comptroller General's accounting principles and standards.

Accounting for and controlling personal property at VA medical centers

Our survey and VA IG reports show VA medical centers need to strengthen accountability for and control over drugs, supplies, and medical equipment to help avoid misuse of these items and the purchase of unneeded equipment. A significant part of VA's funding is used to purchase drugs, supplies, and medical equipment. For example, each year VA spends about

* VA officials informed us that these conditions have been corrected.

$398 million for drugs and medicines; it buys more than $1.5 billion annually in supplies and equipment; its inventory of medical equipment totals more than $1.6 billion.

Several IG audit reports have pointed out deficiencies in medical center controls over drugs and controlled substances. In March 1983, the IG reported on one large medical center's lax security in handling nonnarcotic controlled substances such as Darvon, Valium, and Serax. These substances were stored in open shelves in a freely accessible area. In addition, VA's December 1984 reports prepared pursuant to the Federal Managers' Financial Integrity Act stated that drugs and hospital linens are the two items in VA hospitals that are most susceptible to unauthorized use and loss.

VA's December 1984 FIA reports stated that while ward stock medications are maintained under lock and key and access is minimized, there are still thousands of individuals who have access to the drugs. It is very difficult to identify that a particular item is missing, what quantity is missing and how it disappeared, except in the case of narcotic medications. Our survey of 17 selected medical centers confirmed these internal control weaknesses. We noted that:

--All the pharmacists had access to such controlled substances. A large medical center had 21 pharmacists with access to drugs and would have difficulty pinpointing responsibility for misuse of these drugs. The drugs also are handled and controlled like any other prescription drug, which is contrary to VA regulations requiring that access to controlled substances be restricted to a few pharmacists.

--Hospital ward records do not show what doses of nonnarcotic controlled substances were given to which patients and, as a result, these substances could be diverted without detection.

--Pharmacies do not maintain a list of registered nurses authorized to order narcotics and drugs. Instead, drugs are issued to any registered nurse. At one medical center, 154 registered nurses can order drugs and narcotics.

--Pharmacies maintain lists of authorized physicians and their signatures, but at one pharmacy we noted the staff did not verify signatures when filling prescriptions.

--Excess and outdated controlled substances are not promptly removed from pharmacies and wards, transferred to supply, and destroyed. For example, at one medical center we

visited, 135 line items of expired controlled substances, such as codeine and morphine, were left in active stock after an annual inventory.

VA's December 1984 report prepared pursuant to the Federal Managers' Financial Integrity Act stated that hospital linens (sheets, pillow cases, and towels, for example) are susceptible to unauthorized use and loss, and as a result, linens account for a significant part, as measured in dollars, of the property loss/shrinkage in the Department of Medicine and Surgery. This loss/shrinkage totaled about $8.5 million in 1984. The loss/shrinkage of linens is directly related to the widespread use of linens throughout VA medical facilities, on the wards, in showers, and in treatment areas. All inpatients, many out-patients, and a significant portion of medical facility staff use linen in their activities and thus have access to it. Thus, rather than having a potential loss at a few locations, loss can occur at tens of thousands of locations. VA is testing an electronic surveillance system to control the use of linens in medical centers.

Our survey disclosed that VA medical centers rely on property custodians to ensure supplies and property are not misused or stolen, and excess and unserviceable items are promptly reported. At the medical centers we visited, we noted that stronger controls over supplies and property were needed.

--Purchase orders showing quantities of items ordered are kept at receiving points, and therefore, the possibility exists that overshipments could be misused.

--Inventory and issue records are not routinely maintained and at some medical centers inventory is stored in unlocked, unsupervised rooms.

--Equipment items are tagged to identify them as government property, but such items as cameras, typewriters, and microscopes are not stored in locked cabinets, or storerooms or both. We saw expensive equipment left unattended in open areas when few VA employees were present.

In addition, independent physical inventories of equipment are not routinely performed to check the existence, location, condition, and continued need for equipment items. Instead, chiefs of departments and services in VA medical facilities annually certify that the property assigned them is needed and being used. Property custodians are supposed to periodically spot-check equipment.

These property procedures are not working effectively. For example, a recent VA IG review at a medical center identified 97 underused and unneeded items of medical equipment valued at more than $193,000. The IG reported in March 1983 that another medical center could not find $170,000 worth of medical equipment. At one medical center we visited, four items of medical equipment were reported missing in 1983. Our further investigation disclosed these items were actually missing for several years, yet the chief of the service routinely certified each year that all equipment was accounted for.

VA's ADP and telecommunications plans for the fiscal years 1985-89 include a project to develop a new property accounting and control system for the Department of Medicine and Surgery. The Medical Equipment and Reporting System (MERS) will provide the information needed by VA managers to effectively manage VA's inventory of medical equipment. Details are presented in chapter 4.

GENERAL ADP CONTROLS OVER COMPUTER CENTER OPERATIONS

We reviewed general controls at three VA-wide computer centers. Within the limits of our review scope described in chapter 1, we observed at the three centers visited that:

- --Organization and management controls appeared generally adequate, with the exception of physical security at one center and segregation of duties at another center.

- --Controls over projects to develop automated application systems generally appeared adequate, except that one center experienced problems with involving users and management in the system development process and testing new systems prior to implementation. All three centers did not adequately restrict access to system documentation.

- --Controls over updating and maintaining automated application systems appeared generally inadequate at all three computer centers.

- --Controls over computer operations appeared generally adequate, with the exception that two computer centers experienced problems with (1) restricting access to the center, (2) obtaining approval to modify special computer programs--systems software--that control the operations of the equipment, and (3) testing modifications made to systems software.

--Controls over information received for computer processing were generally adequate, except for one center that did not effectively control information received for processing through a major application system.

--Internal audits of computer center operations and related internal controls were generally inadequate.

--Disaster recovery procedures were neither comprehensive or periodically tested to determine and evaluate their effectiveness.

Overall, the general controls of operations at the three computer centers appeared to need strengthening. Further, independent, third-party reviews of computer center operations, operations of application systems, and general controls in the ADP area have not been done. Appendix XII summarizes the results of our review of general ADP controls.

Computer Center Organization and Management Controls

The Federal Information Processing Standards Publication (FIPS PUB) 31, Guidelines for Automatic Data Processing Physical Security and Risk Management, provides that:

--The organizational structure of the ADP facility should provide for controls through separation of duties. Specifically, execution of critical functions should be divided between two or more persons and that one person should never be totally responsible for a given activity especially if it relates to the processing or development of sensitive applications.

--The ADP facility should be built and operated to (1) provide physical protection against natural disasters, theft, vandalism, sabotage, espionage, civil disorder and other forced intrusions, and (2) restrict access to critical areas to authorized persons and deny access to all other persons.

--Independent and objective audits of ADP facility internal controls should be done.

All computer centers surveyed had formal organization charts and written job descriptions and delegations of responsibilities. Duties were adequately separated at the Austin, TX and Hines, IL, computer centers, and the Hines, IL and Philadelphia computer centers provided for adequate physical security. We, however, noted the following weaknesses:

--The Austin center had conducted a risk analysis for only one application system. It had risk analyses planned for four other systems, but it had no plans to conduct similar analyses for more than 80 other application systems that it operates.

--At the Philadelphia center, computer operators are permitted to change information in automated files from the computer console. Procedures require that a programmer review the changes made to a file by the computer operator; however, computer operators could make unauthorized changes to files and not inform the appropriate programmer of the change.

Controls Over Projects to Develop New Application Systems

FIPS PUB 31 provides that general ADP controls should cover the areas of program design, acceptance testing and standards, and documentation. Specifically, FIPS PUB 31 states that:

--The design and approval of new application systems should be a formal process involving the user, programmer, auditor, and computer operations personnel.

--Installation of a new application system should occur only after thorough program and system tests have been completed and approved. The programmer, testing or quality control personnel, and users should all participate in getting a program from design, through final acceptance tests, to actual operation. Each program should receive a detailed independent review. A system's programmer should not control final acceptance tests.

--No program should be accepted without adequate and complete documentation which an independent body has reviewed and approved. Documentation should cover data, operations, system design, programs, and acceptance tests.

--Programs and documentation should be secured and protected from unauthorized access and modifications.

The Austin and Hines centers generally seemed to have adequate controls in the areas of (1) management and user involvement and approval of projects, (2) test and conversion standards for projects, and (3) documentation standards. At the Philadelphia center, however, internal controls were inadequate. Specifically, we found that:

--Users, particularly for the application systems for the life insurance funds, do not participate in the approval process for changes to insurance application programs.

--Insurance system users do not participate in preparing test data or reviewing and approving test results.

--Applications programmers prepare test data and run the test data through the system.

In commenting on the report, VA stated that it is the policy of the ADP Systems Audit Service in the Office of Data Management and Telecommunications to control preparation of the required test data since the project certification for installation of insurance program changes to production are reviewed and certified by that service based on test results created by test data. FIPS PUB 31, however, states that system users should participate in system tests.

At all three centers visited, application system documentation was not adequately secured and protected from unauthorized access and alteration. At all centers, documentation was stored in unlocked file cabinets or on shelves in areas which were not restricted from access by non-ADP personnel.

Controls Over Updating And Maintaining Application Systems

The provisions of FIPS PUB 31 concerning (1) user involvement and approval, (2) tests, (3) documentation, and (4) security of documentation for projects to design, develop, and implement completely new application systems also apply to system update and maintenance efforts. In fact, FIPS PUB 31 states:

> "Every change, even those involving one statement, (one instruction in a computer program), should be authorized, approved, and documented with no exceptions. Otherwise control is lost and the programming process becomes anarchistic."

All three centers visited generally seemed to have inadequate control over updating and maintaining automated application systems. Specifically, our survey disclosed that:

--At the Philadelphia center, users of the application systems for the VA's insurance funds do not prepare test data or approve test results. Applications programmers develop the actual test data and run the test data through the application system being changed or updated. Further, computer operators have access to system documentation and access to the computer console during application system tests.

--At the Austin center independent supervisory reviews of application system update and maintenance changes are done for certain application programmers. If a programmer is thought to be "good", based on past experience, no review is made of program change before tests are run. A separate systems audit group designs application program tests, but the application programmer does the actual tests of a system change. Application system documentation is available to computer operators, and application programmers have access to application systems in the program library.

--At the Hines center, the Compensation and Pension System, which disbursed about $14 billion in fiscal year 1984 in benefit payments, is not fully documented. The system was initially designed and installed in the late 1950's, and staff expertise in the system is dwindling due to attrition of experienced programmers. Lack of documentation, age of the system, and dwindling staff expertise make it difficult to update and maintain the system. In addition, the available system documentation is not secure. Computer operators have access to the documentation and programmers have access to computer programs in the program library.

Controls Over Computer Operations

It is generally accepted ADP practice to formally document computer center operating procedures. These procedures should cover, among other things, operating schedules, library procedures, error-handling procedures, emergency procedures, and individual staff responsibilities. FIPS PUB 31 provides that:

--all ADP personnel should be trained and supervised to assure understanding of, and compliance with, operating procedures and internal controls; and

--critical ADP areas including the computer room, data control and conversion area, programmers' area, forms storage area, maintenance area, and mechanical equipment room be provided adequate physical protection and access control.

In addition, FIPS PUB 31 provisions concerning (1) management involvement and approval, (2) tests, (3) documentation, and (4) security of documentation for projects to design or modify application programs also apply to maintenance of system software. In fact, FIPS PUB 31 states:

"The most sensitive position is often that of the system programmer; a qualified practitioner of operating system

maintenance can do more damage with less chance of being caught than almost any other person involved with data processing."

All centers we visited had formal operating procedures and adequate supervision of computer center operations. The Hines center had adequate controls for the areas of (1) access to the computer center, (2) authorization and approval, tests, and access to systems software, and (3) quality of systems software and related documentation. The Austin center, however, had control weaknesses in the areas of (1) access to the center, (2) authorization and approval, tests, and access to systems software, and (3) quality of systems software and related documentation. The Philadelphia center had control weaknesses in the areas of (1) access to the computer center, and (2) access to system software.

At the Austin center we observed that:

--Access to the computer center is restricted by a system of badges and badge reader/locks. Individuals, however, from all other divisions had badges. For example, out of 325 individuals issued badges, only 115 were assigned to the computer center. Further, 70 customer engineers, representing 17 equipment vendors had badges. Customer engineers had unescorted access to the computer center.

--System software changes were not approved, tested, or reviewed by an independent (third) party--that is, by non-ADP personnel. ADP supervisors did not normally review system software changes unless they considered the changes substantial. Most of the system software changes at the Austin center, however, were considered substantial.

--Only system software changes initiated by users of automated application systems were tested. All other system software changes that ADP personnel initiated were not tested.

--Application programmers had access to system software and related documentation.

--Center personnel have made extensive changes to several system software packages, especially the program library system and communication software. The documentation of the system software is not always up-to-date. For example, at the time of our survey the center was using version 6.0 of the program library system software, but the available documentation was for versions 5.3 and 5.8.

VA officials told us that the Austin Center has recently installed a commercial software package, called Top Secret, that will control access to all automated files at the center including system software files. In addition, the Austin Center management will reemphasize the need to keep documentation up to date.

At the Philadelphia center we observed that:

--The center is in the same building as the VA's Regional Office, and, as a consequence, non-ADP personnel had access to the computer center. Systems and application programmers periodically operated the computer to test system updates and modifications.

--Systems programmers had access to system software documentation, were allowed access to the computer console, and were permitted to operate the computer. These capabilities gave systems programmers the opportunity to change system software that controlled access to automated files and reference files that contained computer passwords and automated file access codes.

VA officials told us that the Philadelphia Center has issued a written policy to preclude application programmers from operating the computer and the practice has been discontinued.

Controls Over Information Received For Computer Processing

FIPS PUB 31 provides that controls should be imposed over data received for processing at the computer center as well as data kept on automated files maintained by the computer center. Controls should be imposed at all points along the flow of data through the computer center, from the point of receipt of data through processing, storage, and reporting of data. These controls should safeguard against losses or alteration of data and unauthorized access to data.

All centers we visited appeared to have adequate controls over information received for computer processing with the exception of control weaknesses at the Philadelphia center in the areas of (1) acceptance of all (and only) approved input and (2) accurate conversion of data. At the Philadelphia center, we observed that:

--Transaction information for the application systems that support the VA's insurance programs came into the Philadelphia center on paper forms. These forms were processed through an optical character-scanning machine to record transaction information on a magnetic tape file.

Because the computer center generally received large volumes of documents, it did not use record counts to assure that it recorded all documents received onto magnetic tape. As a result, the computer center had no assurance that it actually processed through the computer all transaction information received.

--Users of the information produced by the application systems that support the insurance programs did not reconcile reports on transaction information actually processed through the computer with their own records of transaction information they submitted for processing. As a result, they had no assurance that the center actually processed (1) all information submitted and (2) accurately recorded transaction information onto magnetic tape.

VA's Inspector General also pointed out the lack of reconciliation of transaction information processed through the application systems that support VA's insurance programs in a 1983 report. The limitations of VA's current computer equipment and related application systems preclude such reconciliations.

The current application systems supporting the insurance programs were installed in 1959 and are magnetic-tape-oriented, overnight, sequential-batch-processing systems. Consequently, they require several types of paper documents to input data into the systems and initiate transactions. On any given day several thousands of these documents are prepared for computer processing. The only way to reconcile these inputs with the computer's output would be to physically count and log the inputs. Such a labor-intensive undertaking would require a considerable expense of staff hours and possibly an increase in full-time employees. Even if a log were maintained, it would be a cumbersome process to reconcile against a transaction list generated by the computer because some single inputs trigger multiple transactions and some transactions are produced by the system without inputs.

VA officials told us that the Insurance Terminal System (ITS) project began several years ago, with the aim of bringing modern data processing capabilities to the insurance application systems. In 1983 the first phase of ITS was implemented. When ITS is fully implemented, transaction information will be directly entered into the application systems that support VA's insurance programs via computer terminals. When the goal is achieved, use of paper documents will be virtually eliminated, and VA will then have assurance that all prepared transaction data are processed.

Audits of General
ADP Controls

FIPS PUB 31 provides that audits of computer center operations be performed. It defines the scope of a computer center audit as follows:

> "An independent and objective examination of the information system and its use (including organization components):
>
> a. Into the adequacy of controls, levels of risks, exposures, and compliance with standards and procedures.
>
> b. To determine the adequacy and effectiveness of system controls versus dishonest, inefficiency, and security vulnerabilities."

FIPS PUB 31 also states:

> "The words 'independent' and 'objective' are keys to the definition (of audit). They imply that audit complements normal management inspections, visibility, and reporting systems, and that it is neither a part of, nor a substitute for, line management."

FIPS PUB 31 further states that a computer center audit should (1) evaluate internal controls and security, (2) provide management an opportunity to improve and update controls, (3) provide the impetus to keep employees and management from becoming complacent, and (4) uncover areas of vulnerability. Risks change and new threats arise as systems mature.

We did not address the area of audits in our survey at the Hines center; however, at the Austin and Philadelphia centers, we observed that:

--At the Austin computer center the inspector general (IG) had reviewed installation security, but until the time of our survey (June 1983), had not reviewed any application systems. At the time of our survey, the IG initiated a review of the CALM System. This was the first review of this type the IG performed at the Austin center.

--At the Philadelphia center (1) supervisors did not review system development projects and (2) application programmers designed and conducted system acceptance tests. The ADP Systems Audit Service in the Office of Data Management and Telecommunications makes the final certification check that a system is operating correctly and is ready to be installed for production.

DISASTER RECOVERY
PROCEDURES

FIPS PUB 31 recognizes that even in a computer center with good security and effective internal controls, events can occur which could disrupt normal operations and prevent the center from accomplishing its mission. Therefore, FIPS PUB 31 provides that a computer center should have a formal contingency plan and that the contingency plan be periodically tested and updated based on test results.

FIBS PUB 31 specifically states that contingency plans cover three areas: (1) emergency response, (2) back-up operation, and (3) recovery:

> Emergency Response--Procedures must exist for response to emergencies such as fire, flood, civil commotion, natural disasters, and bomb threats in order to protect lives, limit the damage to property, and minimize the disruptive impact on ADP operations.
>
> Back-up Operation--Back-up operation plans must be prepared to ensure that essential tasks can be completed subsequent to a disruption of normal operations of the computer center and continue to be performed until the computer and its data and program files can be restored.
>
> Recovery--Recovery plans must be developed to permit smooth, rapid restoration of the computer center and its data and program files following physical destruction or major damage.

FIPS PUB 31 further states that since emergencies do not occur often, it would be difficult to assure the adequacy and effectiveness of contingency plans without regular training and testing. It provides that ADP facilities should plan and budget for contingency plan training and tests. Tests of the contingency plans should include regular test runs of applications at the back-up computer facility.

All computer centers we visited had formal written contingency plans. These plans, however, did not include formal arrangements for back-up computer equipment nor had the contingency plans been tested. Specifically:

- --The Austin center's contingency plan listed eight computer centers which had computer equipment compatible with equipment in the Austin center. However, no formal agreements had been reached with the back-up computer centers to provide computer time to the Austin center in the event of an emergency. Further, no aspects of the Austin center's contingency plan had ever been tested.

--The Philadelphia center's contingency plan listed the Austin center as its back-up. One application system had been tested at the Austin center. However, the Austin center could not fully support the Philadelphia center's workload. The Austin center could supply about 5-6 hours of computer time a day for a workload that normally requires 14-18 hours a day.

--The Hines center's contingency plan did not include any provisions for a back-up computer center. Officials at the Hines center informed us that they knew of no Honeywell equipped computer centers that had the capacity to process Hines' workload. The Hines center had not tested any aspects of its contingency plans.

Routine, Independent Reviews of General ADP Controls

Our experience reviewing the operations of automated agency financial management systems shows that general ADP controls over computer center operations complement controls included in individual automated application systems and are crucial to ensuring that the information produced by the application systems is reliable. If general ADP controls are weak, then there is a good chance that effective controls in individual application systems will be nullified with the result that the reliability of the information produced by these systems will be compromised. Unreliable information from automated application systems is one of the main causes of breakdowns in agency management controls over program and administrative operations. One of the tools an agency can use to help ensure that general ADP controls of computer center operations remain effective is to require that periodic, independent audits of center operations are made and that weaknesses disclosed are promptly corrected.

Overall, in the three computer centers we surveyed, general controls over operations appeared to need strengthening. Controls need strengthening particularly in the areas of:

--restriction on access to computer programs and related documentation,

--updates and maintenance of automated application systems,

--restriction on access to computer centers, and

--disaster contingency plans and recovery procedures.

Further, these centers did not perform independent, third-party reviews of computer center operations, operations of application systems, and general controls of computer center operations.

In view of the general ADP control weaknesses disclosed by our survey of the operations at three VA-wide computer centers, ADP reviews should be considered (1) in the future work plans of VA's Inspector General and (2) in VA's efforts to implement the Federal Managers' Financial Integrity Act.

CHAPTER 4

VA'S CURRENT INITIATIVES TO IMPROVE AUTOMATED SYSTEMS AND UPGRADE ADP EQUIPMENT

The VA's ADP and telecommunications plans for fiscal years 1985-89 include initiatives for 52 major automated system development projects (see apps. XIII and XIV) and 5 major procurements of computers and other ADP equipment. The estimated 5-year cost of these initiatives totals more than $244 million--about $191 million for system development projects (see app. XV) and almost $53 million for ADP equipment procurement (see app. XX).

VA designed its planned ADP and telecommunications initiatives to address its two major ADP system and equipment problems. Specifically:

--application software is poorly documented, unstructured, and difficult and costly to modify and maintain, and

--many old pieces of computer equipment acquired during the 1960's and 1970's are difficult to maintain and do not include recent advances in the state-of-the-art in the computer sciences--particularly modern data-entry and retrieval, telecommunications, and database management techniques.

Overall, the VA's ADP and telecommunications plans focus (1) on redesigning its application systems to correct known financial management and internal control problems and to speed up the entry and retrieval of information and (2) on acquiring ADP equipment to take advantage of advances in the state-of-the-art in the computer sciences. Currently, VA is upgrading its central telecommunications system -- VA data transmission system -- to provide for the more efficient collection of information for processing through its automated systems.

Our survey of these plans indicated that 44 of the 52 system development projects cover financial management systems (see app. VIII). The 44 projects appear to be designed to address all but one of the major financial management and internal control problem areas identified by our survey and by the VA in its December 1983 and 1984 reports to the President and the Congress prepared pursuant to the Federal Managers' Financial Integrity Act of 1982. The 44 projects represent a basic overhaul of VA's financial management systems.

The VA's planned system development projects do not appear to address known procedural and internal control weaknesses in

the CALM System. As discussed in chapter 3, these weaknesses have resulted in the duplicate payments and in VA not fully complying with the Prompt Payment Act.

In addition, two major system development projects in the VA's Department of Medicine and Surgery appear to be overlapping efforts. These two projects account for about $131 million out of the total 5-year system development budget of $191 million and for $43 million out of the 5-year ADP equipment budget of $53 million. Both projects are focused on designing and developing a hospital administrative and patient care system. One project--the Integrated Hospital System (IHS)--is congressionally mandated and the other system--the Decentralized Hospital Computer Program (DHCP)--is being developed by VA's Department of Medicine and Surgery. In addition, these systems will provide clinical information to support the financial management phases of plan and program development and budget development and presentation.

Overall, the VA's 44 financial management system development projects are in the study and technical design stages. Consequently, we cannot now assess whether these projects will, in fact, meet design goals after implementation. In a separate review, we are currently assessing the implementation of the DHCP and the progress of the IHS project. chapter 5 of this financial management profile ranks VA's financial management system initiatives in a priority listing.

RESPONSIBILITIES FOR ADP SYSTEMS AND EQUIPMENT RESOURCES AT VA

Overall responsibilities for ADP systems and equipment resources at VA are vested with the Assistant Deputy Administrator for Information Resources Management (ADA/IRM) who oversees the Office of Data Management and Telecommunications (ODM&T). Prior to February 1982, ODM&T was responsible for all VA ADP systems and equipment resources. In February 1982, the VA Administrator delegated responsibility to the Chief Medical Director to implement the Decentralized Hospital Computer Program (DHCP) in VA medical facilities. The Chief Medical Director, through his Medical Information Resources Management Office, coordinates activities to implement the DHCP. The ADA/IRM oversees the acquisition of computer resources to support DHCP.

Currently, ODM&T (1) operates the five VA-wide computer centers, (2) provides ADP support--automated application systems and computer equipment--to the staff offices in VA's central office and the Departments of Veterans Benefits and Memorial Affairs, and (3) manages ADP system development and equipment procurement projects for the VA organizational components it supports. ODM&T prepares and implements VA's long-range ADP and telecommunications plans.

The Department of Medicine and Surgery (1) operates computers in 169 VA medical facilities, (2) provides ADP support for medical programs and operations, and (3) manages ADP system development and equipment procurement projects to support medical programs and operations. It prepares its own long-range ADP and telecommunications plan to supplement ODM&T's plan.

OVERVIEW OF VA'S LONG-RANGE ADP AND TELECOMMUNICATIONS PLANS

VA's ODM&T and Department of Medicine and Surgery plan work on 52 major automated system development projects during the 5-year period, fiscal years 1985-89, that they estimate will cost about $191 million. These projects and their related estimated costs are detailed in appendixes XIII, XIV, and XV. Of the 52 projects, 44 projects involve financial management systems and 8 projects involve management information systems to support VA program operations.

In addition to automated system development projects, the VA plans five major procurements of computers and other ADP - related equipment that will cost an estimated $53 million. Of the five procurements, two will support automated financial management systems, two acquisitions will support automated management information systems, and one purchase will modernize the printing capabilities in ODM&T's five VA-wide computer centers.

The following table summarizes VA's ADP system and equipment plans for the 5-year period, fiscal years 1985-89.

Table 4.1

ADP System and Equipment Plans, FY '85-89

	System projects	Equipment acquisition	Total
		(thousands)	
Financial management systems	$ 59,796	$ 8,165	$ 67,961
Program support management information systems	132,042	43,139	175,181
General ADP support		1,777	1,777[a]
Total	$191,838	$53,081	$244,919

[a]This amount is for electronic printing systems for the five VA-wide computer centers.

FINANCIAL MANAGEMENT ADP SYSTEM AND EQUIPMENT PLANS

In keeping with our overall four-phase agency financial management function model, our discussion of VA's 44 financial management system development projects is organized by the four phases of:

--development of plans and programs,

--formulation and presentation of the budget,

--execution of the budget and accounting for the financial results of program and administrative operations, and

--audits and evaluations.

Two equipment acquisition projects will directly support financial management systems. They include (1) acquiring computer terminals to speed up entering information into and retrieving information from the Fee Basis System and (2) replacing the computer equipment in the Austin, Texas, computer center. The Austin center supports major automated accounting and benefit payment systems.

Planning and programming

Eleven system projects focus on supporting the planning and programming phase:

--DMA Information Processing System,

--Hospital Base Home Care (HBHC) System,[17]

--New Patient Treatment File,[18]

--Construction Management System,

--Construction Technical System,

--Department of Medicine and Surgery (DM&S) Management Information System (MIS),

--Intensive Care Planning Model,

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[17]VA told us that the New Patient Treatment File was put into operation in October 1983.

[18]VA told us that the New Patient Treatment File was put into operation in October 1983.

--Space Classification Methodology,

--Space Planning Criteria Determinants,

--Surgical Space Management Information System, and

--Vertical File.

The HBHC and New Patient Treatment File systems record and report information on medical treatment provided patients and on the results of treatment. These systems will assist the Department of Medicine and Surgery in evaluating the effectiveness of treatment and related costs and in making resource allocation decisions.

The two construction systems, the DM&S MIS, the Intensive Care Planning Model, and the three space planning, classification and management systems will provide the information needed to support the (1) effective planning of medical facility construction projects and (2) the planning for space needs and allocation of space in VA medical facilities.

The Vertical File System will record information on the number of individual veterans receiving health care, project the number of new patients applying for and receiving health care, and estimate the number of previously treated patients who will return for further treatment. The Vertical File will pull information from files currently maintained in five different systems:[19]

--Patient Treatment File,[20]

--CENSUS System,

--Staff Outpatient System,

--Fee Basis System, and

--Compensation, Pension, and Education System.

In commenting on the profile, VA officials told us that development work on the Vertical File was suspended due to development efforts with higher priorities.

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[19]These five systems are also scheduled for redesign during the fiscal year 1985-89 period.

[20]VA told us that the redesigned New Patient Treatment File was put into operation in October 1983.

Budget development

Seven system projects will support the budget development phase:

--Automated Budget System,

--Department of Memorial Affairs (DMA) Information Processing System,

--Automated Management Information System (AMIS),

--Automated Allotment Control System,

--Hospital Based Home Care System,

--Construction Management System, and

--Department of Medicine and Surgery (DM&S) Management Information System (MIS)

The Automated Budget System will be designed to (1) record and report the results of congressional action on VA's budget requests and (2) reconcile VA's budget request with the spending authority approved by the Congress. The DMA Information Processing System will be a comprehensive management system for burial benefits for veterans and their beneficiaries. One function the system will perform is the preparation of the annual budget request for VA's Department of Memorial Affairs.

VA's current Automated Management Information System (AMIS) is its main budget development system. AMIS receives information from a number of other VA financial management systems on the financial results of program and administrative operations and produces a number of reports that support preparation of VA's annual budget request. The current project to enhance AMIS focuses on expanding from 110 to 165, the number of reports produced for VA's budget office and on expanding the AMIS database to cover 5 years of information on the financial results of operations.

The Automated Allotment Control System (ACS) will provide the Department of Medicine and Surgery with a single system to allocate resources to the Department's various programs. The ACS will replace the Department of Medicine and Surgery's current Automated Allotment Accounting, Manpower Tracking, Resource Allocation, and Budget systems.

The HBHC, Construction Management, and Department of Medicine and Surgery MIS systems support both the functions of planning and programming as well as budget formulation. These

three systems provide the support for budget requests for the construction of medical facilities and the support to justify additional space in medical facilities.

Budget execution and accounting

The following 31 system projects (21 listed below plus the 11 subsystem projects of the Compensation, Pension, and Education System) focus on improving the budget execution and accounting phase:

--Loan Guarantee System,

--PAID System (VA's Central Personnel/Payroll System),

--Automated Management Information System,[21]

--Beneficiary Identification and Records Locator subsystem,

--Central Accounts Receivable System (CARS),

--Vocational Rehabilitation and Compensation (VR&C) - Chapter 31 System,

--Vocational Rehabilitation and Education (VR&E) Accounting System,

--Post-Vietnam - Chapter 32 System,

--Post-Vietnam Lump Sum Payments System,

--Post-Vietnam CARS Interface System,

--Post-Vietnam On-Line Processing System,

--Compensation, Pension,and Education System (includes 11 subsystem projects),

--Insurance System,

--Education System,

--Automated Allotment Control System,

--Construction Administration System,

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[21]This system and the Automated Allotment Control System support both the budget development and budget execution and accounting functions. These systems are included in the previous section on the budget development phase.

--ADP Resource Accounting System,

--Medical Equipment Reporting System,

--Non-Recurring Maintenance Program,

--Automated Procurement System, and

--Veterans Canteen Service Accounting System.

The objectives of these 31 system projects are to enhance the control over and accountability for VA's spending authority and its assets and liabilities.

Specifically, these projects will focus on developing systems to ensure that:

--benefits to veterans are made (1) in accord with the provisions of the laws authorizing the benefit programs and (2) only to eligible veterans,

--salary payments are (1) properly computed and (2) only made for hours actually worked,

--amounts owed the government are promptly identified and collected to the fullest extent practicable,

--payments on construction projects are properly computed and only made for work actually done, and

--personal property is protected to the extent practicable against fraud, waste, and mismanagement.

The system projects are designed to achieve these goals by using modern data processing and telecommunications systems and equipment.

Specifically, the system projects will be focused to developing systems that will:

--capture transaction information in a timely manner through the use of modern computer terminals and telecommunications techniques,

--verify the accuracy of transaction information as it is received through improved computer edits,

--enter verified transaction information into computer files when it is received using modern database management systems and techniques, and

--communicate information to managers promptly using modern information retrieval systems, telecommunications systems, and computer terminals.

Overall, the 31 system projects that VA has planned are essentially a complete overhaul of its current veterans benefit, administrative payment, personnel/payroll, accounts receivable, and personal property systems. These projects address the major system issue currently facing VA - that is, outdated and slow ADP systems designed around obsolete batch-data-entry and retrieval and sequential-processing techniques that do not produce needed information quickly. VA's ADP plans also include replacing its current inventory of computer equipment with modern equipment that can use modern data entry and retrieval, telecommunications, and database management techniques.

Audits and evaluations

Two system projects focus on supporting the audits and evaluations phase:

--HBHC System,[22] and

--Geriatric Research, Education, and Clinical Centers (GRECC) System.

Both systems capture, record, and report information on medical treatment of patients and the results of treatment. The systems will be designed to provide the information needed by staff in the Department of Medicine and Surgery to evaluate the effectiveness of the HBHC and GRECC programs.

ADP equipment plans that effect financial management systems

VA plans two major ADP equipment acquisitions that affect financial management systems. They are:

--computer terminals to speed up information entry and retrieval for the Fee Basis System at an estimated cost of $366,000, and

--replacement of computer equipment in the Austin, Texas, computer center at an estimated cost of $7,325,000. The Austin center supports VA's major benefit payment systems.

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[22]This system supports the planning and programming, budget development, and audit and evaluation functions. This system was included in the section on planning and programming.

DEGREE TO WHICH FINANCIAL MANAGEMENT SYSTEM PROJECTS ADDRESS KNOWN PROBLEMS

The 44 financial management system projects appear to address all but one of the major financial management problems disclosed by our survey and by VA in its December 1983 and 1984 reports to the President and the Congress prepared pursuant to the Federal Managers' Financial Integrity Act (See chapter 4.) VA's system development plans do not include a project to address known processing and internal control problems in VA's CALM. Further, since the 44 system projects are in the planning and development stage, we cannot now assess whether these projects will, in fact, correct known problems once they are fully developed and implemented. (See appendix XVII.)

Known financial management problems

Our survey and VA's December 1983 and 1984 Financial Integrity Act reports identified major internal control problems in the following financial management phases:

--planning and programming

- inadequate planning for medical facility construction projects,

--budget development

- inadequate budget estimates for construction projects, and

--budget execution and accounting

- erroneous benefit payments under the (1) fee basis medical care program and (2) compensation, pension, and education benefit programs,
- ineligible persons receiving medical care in VA medical facilities,
- improper salary payments to employees,
- uneconomical procurement of supplies, particularly medical supplies,
- inadequate control over and accountability for personal property, and
- inadequate processing procedures and controls for administrative payments.

VA's system development projects appear to address known financial management problems

Nineteen of the 44 system projects appear to directly address all but one of the known financial management problems at VA. These systems and subsystem projects are summarized below. The other 25 planned projects are designed to improve processing procedures and controls in other VA financial management systems and, when considered together, constitute a virtual overhaul of VA's financial management structure.

Known financial management problems	Planned system projects
Policy and planning:	
--Inadequate planning for medical construction projects	--Construction management system --Construction technical system
Budget development:	
--Inadequate budgeting for medical construction projects	--Construction management system
Budget execution and accounting:	
--Benefit payments made to ineligible persons	--Compensation, and pension systems (includes 11 subsystem projects) --BIRLS --Education system
--Medical care in VA medical facilities provided to ineligible persons	--Vocational Rehabilitation and Counseling Systems - Chapter 31 BIRLS
--Improper salary payments	--PAID system (VA's central personnel/ payroll system)
--Uneconomical procurements of medical supplies	--Automated procurement system

- --Inadequate control over and accountability for personal property
- --Medical equipment reporting system (MERS)
- --Non-recurring maintenance program
- --Inadequate processing procedures and controls for administrative payments
- --No current system project to upgrade the CALM System

In addition, VA plans a procurement of computer terminals to speed up entering information into and retrieving information from the Fee Basis System. Expediting entering and retrieving information by computer terminals should help reduce the occurrence of erroneous benefit payments under the Fee Basis Medical Care Program by providing VA's medical and administrative staff with timely information on medical care provided and payments made under the program.

Known financial management problems not addressed by VA's system development projects

Our survey disclosed that processing and internal control weaknesses in the CALM System have resulted in (1) duplicate payments and (2) payments to vendors not being made when due, resulting in VA not fully complying with the Prompt Payment Act. VA officials responsible for operating the CALM System also recognized the need to correct weaknesses in the system. In May 1981, officials in the VA's Austin, Texas, Computer Center submitted a long-range plan for major enhancements for the CALM System to VA's central office. These enhancements, however, were not included in the fiscal years 1985-89 ADP and telecommunications plan which was published in September 1983.

Overall Focus of VA'S Financial Management ADP System And Equipment Plans

Overall, VA's plans for financial management system development projects and ADP equipment acquisitions appear to be properly focused. Specifically, the 44 system development projects and planned procurements of computer terminals for the Fee Basis System and for replacement of computer equipment in VA's Austin, Texas, computer center (1) are designed to correct all but one of VA's known financial management and internal control weaknesses and (2) represent a virtual overhaul of VA's current financial management systems. These projects, however, are primarily in the system study and technical design stages,

and consequently, we could not at this time assess whether the new systems, when fully developed and implemented, will, in fact, solve the targeted financial management and internal control problems and satisfy the Comptroller General accounting principles and standards and related requirements.

However, waiting to assess these projects when they are fully developed and implemented could result in VA's incurring unnecessary system design and development costs. For example, if the technical design for a particular system initiative does not address certain weaknesses, then the new system would have to be modified soon after implementation to address the weaknesses overlooked during the design stage. Consequently, VA's financial management system projects should be independently reviewed during the design and development state.

Our experience with many agency financial management system development projects has been that, all too often, initial system designs are not completely implemented with the result that the financial systems placed into operation do not solve the processing and internal control problems addressed in the initial conceptual system design. We have found that the key problems agencies often encounter, which result in not completely translating a conceptual design into an operating system, include (1) excluding system users and internal audit staff from participation in the design and development effort, (2) technical compromises to "fit" the system design to existing hardware capabilities, and (3) ineffective "third party" reviews on a continuing basis of the management of the development effort. VA's 5-year ADP system and equipment plans are ambitious and costly undertakings and, as a consequence the execution of these plans should receive close and continual monitoring by top management to help assure that the resources expended will result in systems that will, in fact, solve the financial management problems addressed in the 5-year plan.

Chapter 5 ranks the financial management system projects in VA's 5-year ADP and telecommunications plan in a priority listing. This list will be useful in determining the order in which system projects should be given priority for review during the design and development stages.

SYSTEM DEVELOPMENT PROJECTS THAT APPEAR TO OVERLAP

The Department of Medicine and Surgery has two system development projects that (1) account for 69 percent, or $131 million, of the VA's 5-year system project budget of $191 million and for 82 percent, or $43 million, of VA's project for equipment acquisition of $53 million and (2) appear to be

overlapping efforts.[23] Both projects focus on designing and developing an automated hospital patient care and administrative system. In addition, these systems will provide information to support the financial management phases of plan and program development and budget formulation and presentation.

The Department of Housing and Urban Development-Independent Agencies Appropriation Act, 1981, appropriated over $51 million for fiscal year 1981 to VA for medical administration and miscellaneous operating expense. The conference report (H.R. Rept. 96-1476, November 21, 1980) provided that $800,000 of the appropriation was for continued planning for both integrated and functional health care information systems for VA medical centers. Conferees expected VA to first determine which of the available technologies would be most cost-effective, and of maximum value to its medical center network. The VA program was to use current, off-the-shelf technology (which included both operating VA medical center systems and commercially available systems), and the conferees expected that various alternatives would be analyzed before VA-wide systems were installed.

VA defined an integrated health care system as an automated data processing system in which six functions related to patient care are linked with each other in a common computer hardware and software system. All information needed by the system was to be maintained in a common database based on individual patient masterfile records. The six functions VA identified as mandatory for the proposed integrated health care system were (1) patient registration, (2) patient admission, transfer, and discharge, (3) clinic scheduling, (4) clinical laboratory, (5) inpatient pharmacy, and (6) outpatient pharmacy. The system will have to be linked to the planned Department of Medicine and Surgery's Management Information System (MIS) which will be the Department's main planning and budgeting system. (See appendix XIII.)

In response to the requirement to identify the most cost effective technologies for both integrated and functional health care information systems, VA began to test and/or develop three systems:

--Centralized Medical Information Support System (COMISS),

--Integrated Hospital System (IHS) (commercially available, an off-the-shelf system), and

--Decentralized Hospital Computer Program (DHCP).

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[23]Integrated Hospital System (IHS) and Decentralized Hospital Computer Program (DHCP).

VA's Office of Data Management and Telecommunications began developing and pilot testing COMISS in fiscal year 1982. COMISS included four modules or subsystems: (1) patient registration, (2) patient admissions, discharges, and transfers, (3) patient scheduling, and (4) pharmacy (both inpatient and outpatient).

The Department of Housing and Urban Development - Independent Agencies Appropriation Act, 1983, (Pub. L. No. 97-272, September 30, 1982) appropriated funds for fiscal year 1983 to VA. Neither the act nor the committee reports specifically addressed the use of the these funds for COMISS or any other information system. However, Public Law 97-377 enacted on December 21, 1982, and providing continuing appropriations for fiscal year 1983, subsequently prohibited any of the funds appropriated to VA to be used to further develop, implement, install, administer, operate, or maintain COMISS. It also transferred funds from the office of Data Management and Telecommunications to the Department of Medicine and Surgery to support the Decentralized Hospital Computer Program.

The conference report (H.R. Rept. 97-980, December 20, 1982) stated that delaying the decentralized system was not justified, and VA should continue to develop plans to use the decentralized system. This was consistent with the House Report (H.R. Rept. 97-959, December 10, 1982) in which the House Committee on appropriations stated that COMISS was being designed to accomplish the same workload planned for the Department of Medicine and Surgery decentralized system--that is, the DHCP system. The report stated further that the redundant efforts resulted in duplicative cost, a major waste of expertise and, most importantly, a delay in deriving benefits of computer technology.

The Integrated Hospital System (IHS) is a program administered by the Department of Medicine and Surgery to acquire, operate, and evaluate commercially available hospital information systems in three medical centers. VA medical centers in Philadelphia, PA, Saginaw, MI, and Big Springs, TX were selected as the test sites for the IHS program. The IHS test is underway, and VA expects to complete its evaluation of the IHS project by about April 1987.

VA also currently operates two other related systems: the Automated Hospital Information System (AHIS) at its Washington, D.C. Medical Center and the Honeywell Patient Care System at eight other medical centers.[24] These two systems each meet a wide range of hospital management information needs, specifically:

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[24]VA medical centers: Birmingham, Durham, Hines, Houston, Miami, Long Beach, Minneapolis, and West Los Angeles.

--AHIS provides day-to-day operation via on-line data entry, storage, retrieval, and reporting of patient data that is required to assist in the care of patients and in reporting of data for medical center management. AHIS supports patient admission, discharge, and transfer; patient scheduling; clinical laboratory; radiology; dietetics; nursing; dental; chaplain; and other services.

--The Honeywell Patient Care System is an integrated system supporting patient registration; patient admission, discharge, and transfer; inpatient and outpatient scheduling; and clinical laboratory. At the Miami medical center, the system processes about 300,000 outpatient visits per year. Its clinical laboratory module is complete and includes direct data acquisition from a variety of medical instruments and print-on-ward reports.

The Department of Medicine and Surgery's ADP plan for fiscal years 1984-89, provides that both AHIS and the Honeywell Patient Care System be replaced by the DHCP when it is fully developed.

The VA received appropriations for fiscal year 1984 in the Department of Housing and Urban Development - Independent Agencies Appropriation Act, 1984, (Pub. L. No. 98-45, July 12, 1983). The House Committee on appropriations noted in its report (H.R. Rept. 98-223, May 24, 1983) that VA's budget included no funding for commercial integrated hospital medical computer systems, and directed VA to make funds available to test commercial systems at not less than three medical centers. The Senate Committee on Appropriations similarly directed VA in its report (S. Rept. 98-152, June 14, 1983) and directed VA to develop a plan for the tests subject to approval by the House and Senate Committees.

Consequently, VA's ADP system plans provide for awarding a contract to acquire and test another commercially available integrated hospital management information system at three VA medical centers during the period January 1985 through January 1987. During the test period, VA will compare the commercial System with DHCP and issue a final report on the test results in April 1987.

In fiscal year 1982, VA's Department of Medicine and Surgery began design and development work on DHCP. DHCP is intended to be an integrated hospital management information system for VA medical centers. DHCP is being designed, developed, and implemented by staffs in various VA medical facilities. It is being implemented in two phases: CORE and full CORE. The CORE phase of DHCP includes modules or subsystems for (1) patient registration, (2) patient admission, discharge, and transfer, (3) patient scheduling, and (4)

outpatient pharmacy. The full CORE phase of DHCP includes adding inpatient pharmacy and clinical laboratory modules to the four modules that comprise CORE. In addition, the overall DHCP plan allows individual medical centers to add other locally designed modules to the six modules that comprise full CORE.

The major milestones for the DHCP system effort are as follows:

fiscal year 1982	--began developing and testing CORE DHCP at selected VA medical facilities
fiscal year 1983[25]	--awarded ADP equipment contracts for needed computers and peripheral equipment needed to run DHCP (full CORE) at all VA medical facilities
	--began implementing CORE DHCP at selected VA medical facilities
	--continued development of full CORE
fiscal year 1984	--began receiving delivery of computer equipment for all VA medical facilities
	--began implementing CORE DHCP at all VA medical facilities
	--continued to develop full CORE software
fiscal year 1985	--complete receiving delivery of computer equipment for all VA medical facilities
	--develop system links to the Department of Medicine and Surgery's planned Management Information System (MIS)
	--implement full CORE at all VA medical facilities

[25]In addition to developing CORE DHCP software, VA began software development of some enhanced DHCP modules, for example engineering and mental health modules.

	--maintain full CORE
fiscal years 1986 - 1989	--maintain full CORE
	--continue improvements to CORE
	--fully implement links to the Department of Medicine and Surgery MIS (see appendix XIII)

As of February 1984, VA estimated that the initial and full core DHCP system effort will cost about $204 million to fully develop and implement. As a separate review, we are currently assessing the adequacy of VA's cost estimate. VA's February 1984 cost estimate is detailed in the following table.

Table 4.2

Estimated DHCP Development and Implementation Costs

Fiscal year	System development costs	Equipment costs	Total
	(thousands)		
1982	$ 1,378	$ -	$ 1,378
1983	14,769	-	14,769
1984	31,666	-	31,666
1985	23,619[a]	48,591[b]	72,210
1986	21,796[a]	-	21,796
1987	20,923[a]	-	20,923
1988	20,923[a]	-	20,923
1989	20,923[a]	-	20,923
Totals	$155,997	$48,591	$204,588

[a]See appendix XV.

[b]See appendix XVIII.

Overall, VA's efforts to design, develop, and implement an automated patient care and administrative system for its medical centers appear to overlap. Specifically, the long-range DHCP implementation plan provides for developing and implementing a full-scale, integrated hospital patient care and administrative system even though VA has existing automated systems that include modules which already perform functions scheduled for development as part of the full-scale DHCP.

The long-range DHCP plan does not appear to consider modifying existing software from systems that already exist to fit into its overall DHCP system. For example, the discontinued COMISS system included modules for patient registration, patient scheduling and pharmacy. AHIS, currently operated by VA at one medical center, also includes modules for radiology, dietetics, nursing, and dental services. The Honeywell Patient Care System includes effective modules for inpatient and outpatient scheduling and clinical laboratory.

The software modules discussed above could possibly be modified to fit the overall DHCP system at a lower cost than developing completely new modules for DHCP. The work to review the DHCP and related projects to determine whether the DHCP project could incorporate existing software modules was beyond the scope of this survey.

AGENCY COMMENTS AND OUR EVALUATION

In commenting on this report, VA stated that IHS is being tested at three VA medical centers as mandated by Congress after the DHCP development had been approved and implementation begun. Since both efforts -- IHS and DHCP -- are geared toward accomplishing similar tasks within a hospital setting, albeit through different approaches, overlap is to be expected. VA further commented that current plans for DHCP call for complete replacement of COMISS, AMIS, and the Honeywell Patient Care System because they are written in languages that are incompatible with DHCP and run on equipment that is obsolete. VA has replaced the Honeywell Patient Care System with DHCP and VA's Long Beach California hospital.

In view of the overlap between the DHCP and IHS system development efforts, VA should move as expeditiously as possible to select the system that best meets its needs and focus all its development efforts on that system.

CHAPTER 5

RANKING VA'S FINANCIAL MANAGEMENT SYSTEM PROJECTS ACCORDING TO IMPORTANCE

Using the GAO's Control and Risk Evaluation methodology, we ranked the importance of VA's 44 financial management system projects in its 5-year ADP and telecommunications plans for fiscal years 1985 through 1989. These system projects, as discussed in the previous chapter, represent a virtual overhaul of VA's current financial management system.

The CARE methodology is designed to assess (1) the importance of each system in supporting financial management at the agency and (2) each system's vulnerability to fraud, waste, and mismanagement. Each system is evaluated according to 12 risk factors, with each factor rated as low, medium, or high risk. The system then receives a composite score of the 12 factors and is ordered by score in a priority list of systems showing their relative importance and vulnerability to waste, fraud, and mismanagement.

RISK RANKING FACTORS

The 12 risk ranking factors used to rate VA's 44 system development projects are:

--purpose of system,
--system documentation,
--dollar volume controlled by system,
--amount of system maintenance,
--verification of input,
--degree of automation,
--number of dependent systems,
--amount of computer resources used,
--known system problems,
--recency of audit,
--statutory requirements met, and
--involvement of users and auditors in system design

The process for risk ranking agency financial management systems is fully described in GAO's exposure draft of its CARE Based Audit Methodology To Review and Evaluate Agency Accounting and Financial Management Systems (September 1984).

The criteria for assigning the low, medium, or high risk ratings and the methodology for computing each system's composite risk score are presented in appendix XVIII. Because the ranking factors focus primarily on evaluating accounting and financial management systems in operation, we modified the application of these factors to allow us to evaluate system

development projects. The modifications entailed (1) assigning a value of zero to the factors of system documentation, amount of system maintenance, and recency of audit and (2) assigning a low, medium, or high risk rating to the factor of known system problems based on the problems in the existing system in operation the new system is designed to modify or replace. We assigned dollar values to the dollar-value-controlled-by the-system factor as follows:

--low	$ 0 - 50 million,
--medium	$ 51 - 100 million, and
--high	above $100 million.

RISK RANKING OF VA'S FMSD PROJECTS RISK RANKING OF VA'S FINANCIAL MANAGEMENT SYSTEM DEVELOPMENT PROJECTS

VA's 44 financial management system projects were risk ranked and assigned composite scores. The results of this process are summarized in Table 5.1. Based on the composite scores assigned each system, we ordered these system projects in a priority listing in order of importance to VA's financial management operations. This listing is shown in Table 5.2 below.

TABLE 5.1
RISK RANKING OF VA'S FINANCIAL
MANAGEMENT SYSTEM PROJECTS

SYSTEM PROJECT	RISK RANKING FACTORS												
	Purpose of system	System documentation	Dollar volume controlled	System maintenance	Degree of automation	Number of dependent systems	Computer resources used	Known system problems	Recency of audit	Statutory requirements met	Involvement of users & auditors	Verification of input	Composite Score
	4.4	4.3	4.4	3.9	3.8	4.5	3.2	3.7	3.8	4.5	4.0	4.4	
Loan Guarantee System	3	0	3	0	2	1	1	1	0	1	1	1	58.3
Automated Budget System	1	0	1	0	1	3	1	1	0	1	1	1	45.9
DMA Information Processing System	1	0	1	0	1	3	1	1	0	1	1	1	45.9
AMIS	1	0	1	0	1	3	1	1	0	1	1	1	45.9
BIRLs	3	0	3	0	3	3	3	3	0	3	1	3	102.7
CARs	3	0	3	0	2	3	1	3	0	1	1	1	74.4
VR&C System-Chapter 31	3	0	1	0	3	3	1	1	0	3	1	2	75.7
VR&E Accounting System	3	0	1	0	3	3	1	1	0	3	1	2	75.7
Post-Vietnam-Chapter 32 System	3	0	1	0	3	3	1	1	0	3	1	2	75.7
Post-Vietnam-Lump Sum Payments	3	0	1	0	3	3	1	1	0	1	1	2	75.7
Post-Vietnam-CARS Interface	3	0	1	0	3	3	1	1	0	1	1	1	71.3
Compensation & Pension (11 Subsystems)	3	0	3	0	3	3	3	3	0	3	1	3	102.7
Insurance System	3	0	3	0	3	3	1	1	0	1	1	1	79.9
Education System	3	0	3	0	1	3	1	3	0	1	1	3	79.9
Automated Allotment Control (System)	3	0	1	0	1	1	1	1	0	3	1	1	54.7
HBHC System	1	0	1	0	1	1	1	1	0	1	1	1	36.9
New Patient Treatment File	1	0	1	0	1	2	1	1	0	1	1	1	41.4
Construction Management System	3	0	3	0	1	3	1	3	0	1	1	1	70.9
Construction Administration System	1	0	1	0	1	3	1	1	0	1	1	1	45.9
Construction Technical System	1	0	1	0	1	3	1	3	0	1	1	1	53.3
ADP Resource Accounting System	3	0	1	0	1	1	1	1	0	1	1	1	45.7
Department of Medicine and Surgery MIS System	1	0	1	0	1	3	1	1	0	1	1	1	45.9
MERS	3	0	3	0	1	1	1	3	0	3	1	1	70.9
Intensive Care Planning Model	1	0	1	0	1	1	1	1	1	1	1	1	36.9
Space Classification Methodology	1	0	1	0	1	1	1	1	0	1	1	1	36.9
Space Planning Criteria Determinants	1	0	1	0	1	1	1	1	0	1	1	1	36.9
Surgical Space Management Information System	1	0	1	0	1	1	1	1	0	1	1	1	36.9

TABLE 5.1 (CONTINUED)

RISK RANKING OF VA'S FINANCIAL MANAGEMENT SYSTEM PROJECTS

SYSTEM PROJECT	RISK RANKING FACTORS												
	Purpose of system	System documentation	Dollar volume controlled	System maintenance	Degree of automation	Number of dependent systems	Computer resources used	Known system problems	Recency of audit	Statutory requirements met	Involvement of users & auditors	Verification of input	Composite Score
	4.4	4.3	4.4	3.9	3.8	4.5	3.2	3.7	3.8	4.5	4.0	4.4	
GREEC System	1	0	1	0	1	1	1	1	0	1	1	1	36.9
Non-Recurring Maintenance Program	3	0	3	0	1	1	1	1	0	1	1	1	54.5
Automated Procurement System	3	0	3	0	1	3	1	3	0	1	1	1	70.9
Veterans Canteen Service Accounting System	3	0	3	0	1	1	1	1	0	1	1	1	54.5
Vertical File	1	0	1	0	1	3	1	1	0	1	1	1	45.9
Post-Vietnam On-Line Processing System	3	0	1	0	1	1	1	1	0	1	1	1	45.7
PAID System (Central Personnel/Payroll)	3	0	3	0	3	3	3	3	0	1	1	1	84.9

NOTE:

Low risk = 1
Medium risk = 2
High risk = 3

TABLE 5.2

PRIORITY LIST OF VA'S FINANCIAL MANAGEMENT SYSTEM PROJECTS

System project	Composite score
BIRLS	102.7
Compensation and Pension System (including 11 subsystems)	102.7
PAID System (Central Personnel/Payroll) System)	84.9
Insurance System	79 9
Education System	79.9
VR&C System-Chapter 31	75.7
VR&E Accounting System	75.7
Post-Vietnam-Chapter 32 System	75.7
Post-Vietnam-Lump Sum Payments	75.7
CARS	74.7
Post Vietnam-CARS Interface	71.3
Construction Management System	70.9
MERS	70.9
Automated Procurement System	70.9
Loan Guarantee system	58.3
Automated Allotment Control System	54.7
Non-Recurring Maintenance Program	54.5
Veterans Canteen Service Accounting System	54.5
Construction Technical System	53.3
Automated Budget System	45.9
DMA Information Processing System	45.9
AMIS	45 9
Construction Administration System	45.9
Department of Medicine and Surgery MIS	45.9
Vertical File	45.9
ADP Resource Accounting System	45.7
Post-Vietnam On-Line Processing System	45.7
New Patient Treatment File	41.4
HBHC System	36.9
Intensive Care Planning Model	36.9
Space Classification Model	36.9
Space Planning Criteria Determinants	36.9
Surgical Space Management Information System	36.9
GRECC System	36.9

ABBREVIATIONS USED IN APPENDIXES

ABS	Automatic Budget System
ACS	Allotment Control System
ADP	Automated Data Processing
AMIS	Automated Management Information System
APIS	Automated Pharmacy Information System
ARMIS	Agency Regulation Management Information Retrieval System
AMIS	Automated Management Information System Redesign
BIRLS	Beneficiary Identification and Records Locator Subsystem
C&A	Consulting and Attending Physcians System
CALM	Centralized Accounting for Local Management
CAPOR	Card and Paper Order
CAROLS	Central Accounts Receivable On-Line System
CARS	Central Accounts Receivable System
CASCA	Centralized Accounting System for Construction Appropriations
C&P	Compensation and Pension System
CEC	Continuing Education Center
CP&E	Compensation Pension and Education On-Line System
CPU	Central Processing Unit
CTR	Cathode Ray Tube
DEC	Digital Equipment Corporation
DEPGLCA	Depot Fiscal General Ledger Cost Accounts
DHCP	Decentralized Hospital Computer Program
DMA	Department of Memorial Affairs
DM&S	Department of Medicine and Surgery
DPC	Data Processing Center
LCS	Liquidation and Claims System
GIL	Guaranteed and Insured Loan System
GLS	General Ledger System
GRA	General Risk Assessment
GRECC	Geriatric Research, Education, and Clinical Center
GSA	General Services Administration
HBHC	Hospital Based Home Care System
IHS	Integrated Hospital System
INS	Insurance System
ITSCE	Information and Training System for Continuing Education
LCC	Life Cycle Cost
LOG I	Integrated Procurement, Storage, and Distribution System
MEDIPP	Medical District Initiated Program Planning
MERS	Medical Equipment Reporting System
MIS	Management Information System
MODEMS	Modulators Demodulators
MUMPS	Massachussetts University Medical Programming System
NBC	Nonreceipt of Benefit Checks System

APPENDIX I

VETERANS ADMINISTRATION SUMMARY OF THE NUMBER OF EMPLOYEES AND ESTIMATED PAYROLL EXPENSE (FISCAL YEAR 1983) BY ORGANIZATIONAL COMPONENT

Organizational component	Number of employees	Estimated fiscal year 1983 payroll expense		
		Salaries	Benefits	Total
		(thousands)		
Department of Medicine and Surgery:				
Hospital operations	177,110	$4,401,861	$531,431	$4,933,292
Medical research	3,120	96,622	10,826	107,448
Medical administration	874	31,491	3,307	34,798
	181,104	$4,529,974	$545,564	$5,075,538
Central Office:				
General operations	18,528	$ 457,273	$ 55,819	$ 513,092
Construction programs	751	26,480	3,115	29,595
	19,279	$ 483,753	$ 58,934	$ 542,687
Veterans canteen service	3,007	$ 45,221	$ 5,564	$ 50,785
VA's supply fund	611	$ 15,462	$ 1,515	$ 16,977
Total	204,001	$5,074,410	$611,577	$5,685,987

NRM	Non-Recurring Maintenance Program
OATS	Office of Administration Tracking System
ODM&T	Office of Data Management and Telecommunications
OMB	Office of Management and Budget
PAID	Personnel and Accounting Integrated Data
PFISFAAP	DL/LG Funds Applied and Provided System
PLS	Portfolio Loan System
PMS	Property Management Sytem
POW	Prisoner of War
PTF	Patient Treatment File
REPS	Reinstatement Entitlement Program for Survivors
RFP	Request for Proposal
RMEC	Regional Medical Education Center
SBP	Summary of Benefit Payments
SCI	Spinal Cord Injury Registry System
VA	Veterans Administration
VADS	Veterans Assistance Discharge System
VAMC	Veterans Administration Medical Center
VMLI	Veterans Mortgage Life Insurance System
VR&C	Vocational Rehabilitation and Counseling
VR&E	Vocational Rehabilitation & Education
WAGE	Wage Automated Generated Evaluation System

VETERANS ADMINISTRAITON
SUMMARY OF COMPUTER CENTERS

VA organizational component and location of computer centers	Number of computer systems	Number of central processing units
Office of Data Management and Telecommunications--VA-wide computer centers		
Austin, TX	4	4
Hines, IL	22	26
Los Angeles, CA	2	3
Philadelphia, PA	3	4
St. Paul, MN	4	4
	35	41
VA's Central Office		
Washington, DC	10	11
Department of Medicine and Surgery - VA medical centers		
White River Junction, VT	1	6
Fargo, ND	1	1
Cheyenne, WY	2	2
Overseas	1	2
Wilmington, DE	4	4
Albany, NY	6	6
Albuquerque, NM	2	2
Altoona, Pa	1	1
Tocoma, WA	3	3
Ann Arbor, MI	3	3
Decatur, GA	2	2
Augusta, GA	12	13
Baltimore, MD	6	6
Bay Pines, FL	3	3
Bedford, MA	5	5
Big Spring, TX	1	1
Birmingham, AL	6	6
Boston, MA	15	15
New York-Kings, NY	16	16
Buffalo, NY	3	3
Butler, PA	1	1
Brentwood, CA	1	1
Boise, ID	1	1
Castel Point, NY	1	1
Charleston, SC	4	4
Chicago, IL	6	7
Cincinnati, OH	2	2
Clarksburg, WV	1	1

VA organizational component and location of computer centers	Number of computer systems	Number of central processing units
Cleveland, OH	8	8
Coatesville, PA	2	2
Columbia, MO	6	6
Columbia, SC	7	7
Miami, FL	9	9
Dallas, TX	5	5
Danville, IL	1	1
Dayton, OH	1	1
Allen Park, MI	6	6
Denver, CO	9	9
Des Moines, IA	1	1
North Chicago, IL	10	10
Durham, NC	7	7
East Orange, NJ	7	7
Erie, PA	1	1
Fayetteville, NC	1	1
Fort Howard, MD	1	1
Fort Wayne, IN	1	1
Fresno, CA	3	3
Gainesville, FL	11	12
Grand Junction, CO	3	3
Hines, IL	11	12
Houston, TX	8	10
Indianapolis, IN	4	4
Iowa City, IA	6	6
Kansas City, MO	9	9
Hampton, VA	1	2
Kerrville, TX	1	1
Lexington, KY	10	10
Little Rock, AR	7	7
Livermore, CA	1	1
Long Beach, CA	8	20
Louisville, KY	4	4
Lyons, NJ	1	1
Lorma Linda, CA	14	14
Madison, WI	2	2
Marion, IN	1	1
Martinez, CA	20	20
Martinsburg, WV	2	2
Memphis, TN	3	5
Minneapolis, MN	5	7
Montrose, NY	4	6
Johnson City, TN	2	2
Muskogee, OK	1	1
Nashville, TN	3	5
Newington, CT	3	4
New Orleans, LA	3	3
New York (Kings), NY	4	7
Northport, NY	3	3
Oklahoma City, OK	8	8

APPENDIX II

VA organizational component and location of computer centers	Number of computer systems	Number of central processing units
Omaha, NE	2	3
Palo Alto, CA	23	32
Perry Point, MD	2	2
Philadelphia, PA	6	8
Phoenix, AZ	1	1
Aspinwall, PA	3	3
Portland, OR	6	6
Prescott, AZ	3	3
Providence, RI	2	4
Richmond, VA	5	5
Reno, NV	3	5
St Cloud, NM	2	2
St. Louis, MO	6	13
Salt Lake City, UT	3	3
San Francisco, CA	15	15
Seattle, WA	10	10
San Diego, CA	37	37
Los Angeles, CA	17	17
Shreveport, LA	3	3
Syracuse, NY	6	7
San Antonio, TX	13	13
Tampa, FL	12	12
Temple, TX	6	6
Tomah, WI	1	1
Tucson, AZ	10	11
Tuskegee, AL	2	2
Waco, TX	1	1
Leavenworth, KS	4	4
Washington, DC	9	18
West Haven, CT	9	9
Boston, MA	6	6
Los Angeles, CA	5	5
Milwaukee, WT	8	8
Boston, MA	5	5
Los Angeles, CA	2	2
Lubbock, TX	1	1
New York-Kings, NY	1	1
	609	680
Total	654	732

APPENDIX III

Schedule 1

VETERANS ADMINISTRATION
SOURCES AND USES OF FUNDS FOR
FISCAL YEAR 1983

	Benefit programs[a]	Six life insurance funds[a]	Seven loan funds[a]	Canteen Service[a]	Total
	(thousands)				
Funds available and used					
Unobligated balance at beginning of year	$ 1,458,621	$ 9,586,632	$ 761,737	$ 2,362	$11,809,352
Funds appropriated	24,298,995	1,323,760	196,739	-	25,819,494
Nonfederal funds	499,835	682,660	1,131,233	178,224	2,491,952
Total funds available	$26,257,451	11,593,052	2,089,709	180,586	40,120,798
Less: unobligated balance at end of year	(822,406)	(9,862,282)	(1,157,723)	(2,640)	(11,845,051)
Funds used	$25,435,045	$ 1,730,770	$ 931,986	$177,946	$28,275,747
Funds used by purpose					
Benefit payments	$15,533,073	$ -	$ -	$ -	$15,533,073
Reimbursable program	536,573	-	-	-	536,573
Interfund transfers	7,340	810	-	-	8,150
Disbursements on life insurance policies	105	1,729,960	-	-	1,730,065
Disbursements on loan and loan guarantee operations	-	-	931,986	-	931,986
Canteen service retail store operations	-	-	-	177,946	177,946
Operations of medical facilities	8,261,529	-	-	-	8,261,529
Capital construction projects	1,082,705	-	-	-	1,082,705
Grants	13,720	-	-	-	13,720
Funds used	$25,435,045	$ 1,730,770	$ 931,986	$177,946	$28,275,747

[a]See schedule 2, app. III.

APPENDIX III

VETERANS ADMINISTRATION
SOURCES AND USES OF FUNDS FOR
FISCAL YEAR 1983

Schedule 2

Sources of fund	VA program[a]	VA six insurance funds[b]	VA seven loan funds[c]	Canteen service	VA total
Sources of funds	(thousands)				
Unobligated balance at beginning of year	$ 1,458,621	$ 9,586,632	$ 761,737	$ 2,362	$11,809,352
Appropriated funds:					
Appropriated funds for VA	24,161,902	1,213,000	200,359	-	25,575,261
Appropriated funds transferred from other accounts and funds	137,093	110,760	36,883	-	284,736
Appropriated funds (unobligated funds available) transferred to other accounts	-	-	(40,503)	-	(40,503)
Total	$24,298,995	$ 1,323,760	$ 196,739	$ -	$25,819,494
Nonfederal funds:					
Collections from nonfederal organizations	$ 28,200	$ -	$ -	$ -	$ 28,200
Collections of overpayments to veterans and/or survivors	470,980	-	-	-	470,980
Policy loan repayments	183	163,551	16,100	-	179,834
Policy lien repayments	-	399	-	-	399
Loan repayments	-	-	88,626	-	88,626
Sale of loans/merchandise	-	-	839,412	178,016	1,017,428
Sale of real property/equipment	-	-	45,579	58	45,637
Premiums earned	390	249,011	25,500	-	274,901
Interest income	53	9,065	112,455	-	121,573
Other income	-	835	-	150	985
Administrative cost premiums earned	-	789	-	-	789
Optional income settlement	29	16,515	-	-	16,544
Income offsets and adjustments	-	242,495	-	-	242,495
Rental income and other revenue	-	-	4,200	-	4,200
Other repayments	-	-	(5,495)	-	(5,495)
Loan fees	-	-	6	-	6
Collection of defaulted loans	-	-	$ 4,850	-	4,850
Total	$ 499,835	$ 682,660	$1,131,233	$178,224	$ 2,491,952
Total funds available	$26,257,451	$11,593,052	$2,089,709	$180,586	$40,120,798
Less: unobligated balance at end of year	(882,406)	(9,862,282)	(1,157,723)	(2,640)	(11,845,051)
Funds used	$25,435,045	$ 1,730,770	$ 931,986	$177,946	$28,275,747

APPENDIX III

Schedule 2
(continued)

Users of funds	VA programs	VA six insurance funds	VA seven Loan funds	Veterans Canteen Service	VA total
	(thousands)				
Benefit payments:					
Living veterans	$ 12,187,161	$ -	$ -	$ -	$ 12,187,161
Clothing allowances for veterans	3,324,135	-	-	-	3,324,135
Survivors of deceased veterans	21,777	-	-	-	21,777
	$ 15,533,073	$ -	$ -	$ -	$ 15,533,073
	$ 536,573	$ -	$ -	$ -	$ 536,573
Reimbursable program					
Payments to:					
VA general operating expense appropriation	$ -	$ 810	$ -	$ -	$ 810
U.S. government life insurance fund	19	-	-	-	19
Policy holders and beneficiaries	1,306	-	-	-	1,306
National service life insurance fund	2,125	-	-	-	2,125
Service disabled veterans insurance fund	3,890	-	-	-	3,890
	$ 7,540	$ 810	$ -	$ -	$ 8,150
Disbursements for:	$ -	$ 123,440	$ -	$ -	$ 123,440
Premium payments	-	650,070	-	-	650,070
Claims	-	703,347	-	-	703,347
Dividends	-	31,453	-	-	31,453
Other	-	64,860			64,860
Cash surrenders	105	156,328	-	-	156,433
Policy loans	-	462	-	-	462
Policy liens	$ 105	$ 1,729,960	$ -	$ -	$ 1,730,065
Disbursements for:					
Direct loans to veterans	$ -	$ -	$ 4,562	$ -	$ 4,562
Purchases of real property and property improvements	-	-	575,294	-	575,294
Claims	-	-	60,598	-	60,598
Repurchase of loans	-	-	39,162	-	39,162
Cash advances -- vender loans	-	-	11,167	-	11,167
Purchase of loans	-	-	4,134	-	4,134
Payments to veterans	-	-	49,290	-	49,290
Participation disenrollments	-	-	83,910	-	83,910
Payments for services to veterans	-	-	7,700	-	7,700
Property management expense	-	-	30,946	-	30,946
Sales expenses	-	-	24,451	-	24,451
Interest expense	-	-	40,772	-	40,772
	$ -	$ -	$ 931,986	$ -	$ 931,986
Disbursement for:					
Purchase of goods for sale	$ -	$ -	$ -	$ 113,400	113,400
Operating expenses	-	-	-	60,691	60,691
Puchases of equipment and leasehold	-	-	-	3,855	3,855
	$ -	$ -	$ -	$ 177,946	$ 177,946
Disbursement for:					
Operating expenses for Veterans Administration medical programs	$ 7,570,377	$ -	$ -	$ -	7,570,377
Salaries and other expenses	691,152	-	-	-	691,152
	$ 8,261,529	$ -	$ -	$ -	$ 8,261,529
Disbursements for:					
Capital investments to medical care facilities	$ 344,314	$ -	$ -	$ -	$ 344,314
Major construction projects	591,754	-	-	-	591,754
Minor construction projects	146,637	-	-	-	146,637
	1,082,705	-	-	-	1,082,705
Grants	$ 13,720	$ -	$ -	$ -	$ 13,720
Total funds used	$ 25,435,045	$ 1,730,770	$ 931,986	$ 177,946	$ 28,275,747

[a]See schedule 3, app. III.
[b]See schedule 4, app. III.
[c]See schedule 5, app. III.

APPENDIX III

VETERANS ADMINISTRATION
FISCAL YEAR 1983 SOURCES AND USES OF FUNDS
FOR VETERANS ADMINISTRATION PROGRAMS

Schedule 3

	Compensation program	Pension program	Burial and miscellaneous assistance program	Readjustment benefits program	Veterans insurance and indemnities	Medical care program	Medical and prosthetic research program	Medical Administration & Operating Expenses	General operating expenses	Construction major projects	Construction minor projects	Grants states and Republic of the Philippines	Assistance for health manpower training	Total
	(thousands)													
Source of funds														
Unobligated balance at beginning of year	$ 304,986	$ 159,266	$ -	$ 6,721	$ 390	$ -	$ 5,341	$ 5,977	$ -	$ 833,519	$ 129,178	$ 4,952	$ 8,291	$ 1,458,621
Appropriated funds - fiscal year 1983	9,374,900	3,827,200	141,000	1,665,800	6,400	7,692,051	154,839	-	-	-	-	-	-	-
Funds transferred from other accounts and appropriated funds	87,700		-	11,000	-	32,800	3,500	$ 56,420	$691,152	$ 407,392	$ 141,748	3,000	-	24,161,902
Funds transferred to other accounts	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonfederal funds:	-	-	-	-	-	-	-	-	$ 2,093	-	-	-	-	137,093
Nonfederal sources	-	-	-	-	-	28,200	-	-	-	-	-	-	-	28,200
Collection of overpayments to veterans	15,801	148,350	-	306,829	-	-	-	-	-	-	-	-	-	470,980
Policy loan and lien repayments	-	-	-	-	183	-	-	-	-	-	-	-	-	183
Premiums earned	-	-	-	-	390	-	-	-	-	-	-	-	-	390
Interest on loans	-	-	-	-	53	-	-	-	-	-	-	-	-	53
Optional income settlement	-	-	-	-	29	-	-	-	-	-	-	-	-	29
Total funds available	9,783,387	4,134,816	141,000	1,990,350	7,445	7,753,051	163,680	62,397	693,245	1,240,911	270,926	7,952	8,291	26,257,451
Less: unobligated balance at end of year		(45,500)	-	-	-	-	(937)	-	-	(649,157)	(124,289)	(457)	(2,066)	(822,406)
Funds used	$9,783,387	$4,089,316	$141,000	$1,990,350	$7,445	$7,753,051	$162,743	$ 62,397	$693,245	$ 591,754	$ 146,637	$ 7,495	$ 6,225	$25,435,045
Uses of funds														
Benefit payments to:														
Living veterans	$7,934,759	$ 2,562,800	$ 6,081	$1,683,521	$ -	$ 60,000	$ 3,500	$ -	$ -	$ -	$ -	$ -	$ -	$12,187,161
Survivors of deceased veterans	1,811,050	1,378,166	134,919	-	-	-	-	-	-	-	-	-	-	3,324,135
Clothing allowance payments to veterans	21,777	-	-	-	-	-	-	-	-	-	-	-	-	21,777
Reimbursable program	15,801	148,350	-	306,829	-	-	-	-	2,093	-	-	-	-	536,573
Payments to:														
U.S. government life insurance fund	-	-	-	-	19	-	-	$ -	$ -	$ -	$ -	$ -	$ -	$ 19
Policy holders and beneficiaries	-	-	-	-	1,306	-	-	-	-	-	-	-	-	1,306
National service life insurance fund	-	-	-	-	2,125	-	-	-	-	-	-	-	-	2,125
Service disabled veterans insurance fund	-	-	-	-	3,890	-	-	-	-	-	-	-	-	3,890
Policy loans	-	-	-	-	105	-	-	-	-	-	-	-	-	105
Operating expenses for Veterans Administration medical programs	-	-	-	-	-	7,360,563	147,958	-	-	-	-	-	-	-
Capital investment for medical care facilities	-	-	-	-	-	332,488	11,285	61,856	-	-	-	-	-	7,750,377
Payments for salaries and other expenses	-	-	-	-	-	-	-	541	-	-	-	-	-	344,314
Payments for major construction projects	-	-	-	-	-	-	-	-	691,152	-	-	-	-	691,152
Payments for minor construction projects	-	-	-	-	-	-	-	-	-	591,754	-	-	-	591,754
Grants to states and Republic of the Philippines and medical training schools	-	-	-	-	-	-	-	-	-	-	146,637	7,495	6,225	146,654 13,720
Total funds used	$9,783,387	$4,089,316	$141,000	$1,990,350	$7,445	$7,753,051	$162,743	$ 62,397	$693,245	$591,745	$ 146,637	$ 7,495	$ 6,225	$25,435,045

APPENDIX III

Schedule 4

VETERANS ADMINISTRATION
FISCAL YEAR 1983 SOURCES AND USES OF FUNDS
FOR SEVEN LOAN, LOAN GUARANTEE, AND SPECIAL ACCOUNTS FUNDS

	Loan guarantee revolving fund	Direct loan revolving fund	Education loan fund	Vocational rehabilitation revolving fund	Special therapeutic and rehabilitation activities fund	Post-Vietnam era veterans education account	General post fund-national homes	Grand total
	(thousands)							
Sources of funds								
Unobligated balance at beginning of year	$ 74,764	$ 367,886	$ 3,266	$ 1,333	$ 893	$ 300,313	$ 13,282	$ 761,737
Unobligated balance transferred to other accounts	(24,866)	(4,637)	(11,000)	-	-	-	-	(40,503)
Permanent appropriation/budget authority	-	-	-	-	-	191,959	8,400	200,359
Appropriated funds--interest income on federal securities	29,183	7,700	-	-	-	-	-	36,883
Nonfederal funds:								
Loan repayments	42,460	41,016	1,600	1,050	2,500	-	-	88,626
Sale of loans	725,128	114,284	-	-	-	-	-	839,412
Sale of real property	45,339	240	-	-	-	-	-	45,579
Premium loan sales	25,500	-	-	-	-	-	-	25,500
Collection of claims against veterans	16,100	-	-	-	-	-	-	16,100
Interest of loans	85,501	25,100	1,854	-	-	-	-	112,455
Rental income and other revenue	3,000	1,200	-	-	-	-	-	4,200
Other repayments	(5,500)	(95)	100	-	-	-	-	(5,495)
Loan fees	-	-	6	-	-	-	-	6
Collection of defaulted loans	-	-	4,850	-	-	-	-	4,850
Total funds available	$1,016,609	$ 552,694	$ 676	$ 2,383	$ 3,393	$ 492,272	$ 21,682	$ 2,089,709
Less: unobligated balance at end of year	(242,900)	(539,077)	(476)	(1,323)	(893)	(359,072)	(13,982)	(1,157,723)
Fund used	$ 773,709	$ 13,617	$ 200	$ 1,060	$ 2,500	$ 133,200	$ 7,700	$ 931,986
Uses of funds								
Disbursements - program items								
Direct loans to veterans	$ -	$ 802	$ 200	$ 1,060	$ 2,500	$ -	$ -	$ 4,562
Purchases of real property and property improvements	575,245	49	-	-	-	-	-	575,294
Claims	60,598	-	-	-	-	-	-	60,598
Repurchase of loans	39,162	-	-	-	-	-	-	39,162
Cash advances--vender loans	10,000	1,167	-	-	-	-	-	11,167
Purchase of loans	4,134	-	-	-	-	-	-	4,134
Payments to veterans	-	-	-	-	-	49,290	-	49,290
Participation disenrollments	-	-	-	-	-	83,910	-	83,910
Payments for services to veterans	-	-	-	-	-	-	7,700	7,700
Disbursements - operating expenses	-	-	-	-	-	-	-	-
Property management expense	30,612	334	-	-	-	-	-	30,946
Sales expense	24,451	-	-	-	-	-	-	24,451
Interest expense	29,507	11,265	-	-	-	-	-	40,772
Total uses of funds	$ 773,709	$ 13,617	$ 200	$ 1,060	$ 2,500	$ 133,200	$ 7,700	$ 931,986

APPENDIX III

schedule 5

VETERANS ADMINISTRATION
FISCAL YEAR 1983 SOURCES AND USES OF FUNDS
FOR SIX INSRUANCE FUNDS

	Service disabled veterans insurance fund	Veterans reopened insurance fund	Serviceman's group life insurance fund	National life insurance fund	United States government life insurance fund	Veterans special fund insurance fund	Total
	(thousands)						
Sources of funds							
Unobligated balance at beginning of year	$ 3,552	$ 489,924	$ 40,098	$ 7,990,157	$ 331,867	$ 731,034	$ 9,586,632
Permanent appropriated/budget authority	-	-	-	1,187,000	26,000	-	1,213,000
Appropriated funds:							
Veterans insurance and indemnities	3,890	-	-	-	-	-	3,890
Interest income of federal securities	-	44,140	4,450	-	-	58,280	106,870
Nonfederal funds:							
Policy loan repayments	4,795	7,466	-	134,569	6,683	10,038	163,551
Policy lein repayments	105	24		231	27	12	399
Premium earned	21,100	20,411	141,300	-	-	66,200	249,011
Interest on investments (policy loans)	1,985	2,630	-	-	-	4,450	9,065
Other income	525	310	-	-	-	-	835
Administrative cost premium earned	-	789	-	-	-	-	789
Optional income settlement	-	-	-	14,800	895	820	16,515
Income offsets and adjustments	-	-	-	240,900	1,595	-	242,495
Total funds available	$ 35,952	$ 565,694	$ 185,848	$ 9,567,657	$ 367,067	$ 870,834	$11,593,052
Less: unobligated balance at end of year	(3,552)	(508,774)	(61,598)	(8,210,057)	(298,367)	(779,934)	(9,862,282)
Funds used	$ 32,400	$ 56,920	$ 124,250	$ 1,357,600	$ 68,700	$ 90,900	$ 1,730,770
Uses of funds							
Disbursements:							
Premium payments	-	-	123,440	-	-	-	123,440
Claims	20,790	17,800	-	540,900	39,910	30,670	650,070
Dividends	-	15,530	-	629,193	23,284	35,340	703,347
Other	4,810	15,330	-	77	11	11,225	31,453
Cash surrenders	-	-	-	62,730	2,130	-	64,860
Capital outlays:							
Policy loans	$ 6,659	$ 8,233	$ -	$ 124,450	$ 3,336	$ 13,650	$ 156,328
Policy leins	141	27	-	250	29	15	462
General operating expenses:							
Payment to VA general operating	-	-	810	-	-	-	810
Total uses of funds	$ 32,400	$ 56,920	$ 124,250	$ 1,357,600	$ 68,700	$ 90,900	$ 1,730,770

APPENDIX IV

VETERANS ADMINISTRATION
STATEMENT OF FINANCIAL POSITION
SEPTEMBER 30, 1982

	Veterans Administration consolidated	Loans guarantee revolving fund	Direct loan revolving fund	Canteen service fund	Service disabled insurance fund	Veterans reopened insurance fund	VA education local fund	Vocational rehabilitation loan fund	Therapeutic and rehabilitation activities fund	Group life insurance fund	Supply fund	Construction fund	Post-Vietnam era VA education	General post fund-national homes	National service life insurance fund	U.S. government life insurance fund	Veterans special life insurance fund	VA-other funds
	(millions)																	
Assets																		
Current																		
Fund balances with Treasury	$ 5,953.8	$ 99.3	$379.4	$20.4	$ 6.5	$ .9	$ 3.3	$ 1.4	$ .8	$ 2.9	$118.7	$ .2	$303.7	$ 9.0	$ 14.1	$ .9	$ .7	$ 4,991.6
Federal securities at par	10,091.9	-	-	-	-	487.2	-	-	-	37.1	-	-	-	5.2	8,446.3	355.7	760.4	
Accounts receivable less allowances	1,266.2	8.5	2.3	2.6	1.0	12.3	-	-	.2	-	23.6	-	1.2	.2	214.4	7.4	16.9	975.6
Advances to others	41.8	37.4	4.2	-	-	-	-	-	-	-	.2	-	-	-	-	-	-	-
Other current assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total current assets	17,353.7	145.2	385.9	23.0	7.5	500.4	3.3	1.4	1.0	40.0	142.5	.2	304.9	14.4	8,674.8	364.0	778.0	5,967.2
Inventories	158.9	-	-	22.0	-	-	-	-	-	-	108.4	-	-	-	-	-	-	28.5
Long-term																		
Loans receivable	3,122.4	1,299.5	361.8	-	34.5	45.4	61.4	.4	-	-	-	-	-	-	1,198.5	38.9	82.0	-
Property and equipment less allowances	5,832.1	587.1	1.8	12.4	-	-	-	-	.2	-	1.9	-	-	16.7	-	-	-	5,212.0
Other assets less allowances	1,200.7	73.8	-	-	.6	-	-	-	-	-	-	-	-	.2	.2	-	-	1,125.9
Total long-term assets	10,155.2	1,960.4	363.6	12.4	35.1	45.4	61.4	.4	.2	-	1.9	-	-	16.9	1,198.7	38.9	82.0	6,337.9
Total assets	27,667.8	2,105.6	749.5	57.4	42.6	545.8	64.7	1.8	1.2	40.0	252.8	.2	304.9	31.3	9,873.5	402.9	860.0	12,333.6
Liabilities																		
Current																		
Accounts payable	2,941.0	66.5	17.6	12.6	2.7	7.7	-	-	.1	-	39.1	-	4.6	.9	499.6	24.4	30.4	2,234.8
	26.5	3.8	.4	-	1.2	2.8	-	-	-	-	.5	-	-	-	-	1.2	16.6	-
	2,967.5	70.3	18.0	12.6	3.9	10.5	-	-	.1	-	39.6	-	4.6	.9	499.6	25.6	47.0	2,234.8
Long-term																		
Deposit fund liabilities	67.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67.9
Unfunded liabilities	735.1	-	-	3.2	-	-	-	-	-	-	.9	-	-	-	-	-	-	731.0
Long-term debt	1,955.9	1,554.5	401.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total long-term liabilities	2,758.9	1,554.5	401.4	3.2	-	-	-	-	-	-	.9	-	-	-	-	-	-	798.9
Other liabilities	11,188.7				210.1	499.4	-	-	.1	-	-	-	-	-	9,312.3	370.2	796.7	-
Total liabilities	16,915.1	1,624.8	419.4	15.8	214	509.9	-	-	.1	-	40.5	-	4.6	.9	9,811.9	395.8	843.7	3,033.7
Government equity																		
Unobligated spending authority	12,667.5	74.9	367.6	2.4	3.6	489.9	3.3	1.4	.9	40.0	44.1	.2	300.3	15.4	7,990.1	331.8	731.0	2,272.6
Obligations	1,572.1	-	.2	8.0	-	-	-	-	-	-	173.0	-	-	-	-	-	-	1,390.9
Unfilled customer orders	(114.2)	-	-	-	-	-	-	-	-	-	(114.2)	-	-	-	-	-	-	-
Invested capital	(3,565.6)	405.9	(37.7)	31.2	(175.0)	(454.0)	61.4	.4	.2	-	109.4	-	-	16.8	(8) 713.6	(331.3)	(714.7)	5 635.4
Receipt account equity	192.9	-	-	-	-	-	-	-	-	-	-	-	-	.2	185.1	6.6	-	1.0
Total government equity	10,752.7	480.6	330.1	41.6	(171.4)	35.9	64.7	1.8	1.1	40.0	212.3	.2	300.3	30.4	61.6	7.1	16.3	9,299.9
Total liabilities and government equity	$27,667.8	$2,105.5	$749.5	$57.4	$ 42.6	$ 545.8	$64.7	$1.8	$1.2	$40.0	$252.8	$ .2	$304.9	$31.3	$9,873.5	$ 402.9	$ 860.0	$12,333.6

APPENDIX V

VETERANS ADMINISTRATION
STATEMENT OF FINANCIAL POSITION
SEPTEMBER 30, 1983

	Veterans Administration consolidated	Loan guarantee revolving fund	Direct Loan revolving fund	Canteen service revolving fund	Service Disabled veterans insurance fund	Veterans reopened insurance fund	Veterans Administration education fund	Vocational rehabilitation revolving fund	Veterans Administration special therapetic and rehabilitation activities fund	Servicemen's group life insurance fund	Supply fund	Post Vietnam era veterans education account	General post fund-national homes	Nation service life insurance fund	U.S government life insurance fund	Veterans special life insurance fund	Veterans Administration other funds
	(millions)																
Assets																	
Current																	
Fund balances with Treasury	$ 1,019.6	$ 138.9	$214.2	$25.7	$ 6.0	$ .3	$ 1.3	$1.4	$ .8	$ -	$141.1	$ -	$ -	$ -	$ -	$ -	$ -
Federal securities at par	10,404.2	-	-	-	-	510.3	-	-	-	79.7	-	385.7	11.9	6.7	.5	.9	84.2
Accounts receivable less allowances	317.2	12.9	2.2	1.4	1.1	13.1	-	-	.2	1.3	25.6	-	-	8,764.9	322.5	816.8	-
												2.1	3.7	227.8	6.7	19.1	-
Advances to others	70.1	53.3	11.2	-	-	-	-	-	-	-	5.6	-	-	-	-	-	-
Other current assets	.1	-	-	.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Total current assets	11,901.2	205.1	227.6	27.2	7.1	523.7	1.3	1.4	1.0	81.0	172.3	387.8	15.6	8,999.4	329.7	836.8	84.2
Inventories	23.2	-	-	23.0	-	-	-	-	-	-	.2	-	-	-	-	-	-
Long-term																	
Loans receivable	2,836.5	1,207.4	219.3	-	35.7	43.9	61.1	.4	-	-	-	-	-	1,152.0	35.0	81.7	-
Property and equipment less allowances	759.9	722.3	1.9	12.9	-	-	-	-	.2	-	2.3	-	20.3	-	-	-	-
Other assets less allowances	206.3	97.7	-	-	.6	-	-	-	-	-	107.7	-	-	.3	-	-	-
Total long term assets	3,802.7	2,027.4	221.2	12.9	36.3	43.9	61.1	.4	.2	-	110.0		20.3	1,152.3	35.0	81.7	
Total assests	15,727.1	2,232.5	448.8	63.1	43.4	567.6	62.4	1.8	1.2	81.0	282.5	387.8	35.9	10,151.7	364.7	918.5	84.2
Liabilities																	
Current																	
Accounts payable	705.7	76.3	14.5	14.5	2.6	9.3	-	-	.1	-	-	6.8	5.3	451.2	23.9	34.5	-
Advances received from others	116.2	7.6	.5	-	1.3	2.9	-	-	-	-	-	-	-	86.8	-	17.0	-
Total current liabilities	821.9	83.9	15.2	14.5	3.9	12.2	-	-	.1	-	66.6	6.8	5.3	558.0	23.9	51.5	-
Long-Term																	
Deposit fund liabilities	68.7	-	-	-	-	-	-	-	-	-		-	-	-	-	-	68.7
Unfunded liabilities	4.3	-	-	3.4	-	-	-	-	-	-	.9	-	-	-	-	-	-
Long-term debt	1,930.0	1,833.5	96.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total long-term liabilities	2,003.0	1,833.5	96.5	3.4	-	-	-	-	-	-	.9	-	-	-	-	-	-
Other liabilities	11,499.4	-	-	-	222.6	528.7	-	-	-	-	-	-	(.3)	9,563.6	333.0	851.8	-
Total liabilities	14,324.3	1,917.4	111.7	17.9	226.5	540.9	-	-	.1	-	67.5	6.8	5.0	10,101.6	356.9	903.3	68.7
Government equity																	
Unobligated spending authority obligations	10,722.4	121.2	212.1	3.8	3.2	511.5	1.3	1.4	.9	81.0	57.8	380.9	-	8,262.3	299.8	785.2	-
	153.3	-	.2	8.8	-	-	-	-	-	-	144.3	-	-	-	-	-	-
Unfilled (customer) orders	(96.2)	-	-	-	-	-	-	-	-	-	(96.2)	-	-	-	-	-	-
Invested capital	(9,597.3)	193.9	124.8	32.6	(186.3)	(484.7)	61.1	.4	.2	-	109.1	-	30.9	(8,411.3)	(297.9)	(770.1)	-
Receipt account equity	2,206.	-	-	-	-		-	-	-	-	-	.1	-	199.1	5.9	-	15.5
Total government equity	1,402.8	315.1	337.1	45.2	(183.1)	26.8	62.4	1.8	1.1	81.0	215.0	381.0	30.9	50.1	7.8	15.1	15.5
Total liabilities and government equity	$15,727.1	$2,232.5	$448.8	$63.1	$ 43.4	$ 567.7	$62.4	$1.8	$1.2	$81.0	$282.5	$387.8	$35.9	$10,151.7	$ 364.7	$918.4	$84.2

APPENDIX VI

VA STATEMENTS ON FINANCIAL POSITION FOR FISCAL YEARS ENDED SEPTEMBER 30, 1982, AND SEPTEMBER 30, 1983, AS PUBLISHED IN TREASURY'S BULLENTINS

	Sept. 30, 1982	Sept. 30, 1983	Increase/(decrease)
		(millions)	
ASSETS			
Current			
Fund balances with Treasury	$ 5,953.8	$ 1,019.6	$(4,934.2)
Federal securities-at par	10,091.9	10,494.2	402.3
Accounts receivable less allowances	1,266.2	317.2	(949.0)
Advances to others	41.8	70.1	28.3
Other current assets	-	.1	.1
Total current assets	$17,353.7	$11,901.2	$(5,452.5)
Inventories	$ 158.9	23.2	(135.7)
Long-Term			
Loans receivable	$ 3,122.4	$ 2,836.5	$ (285.9)
Real property and equipment less allowances	5,832.1	759.9	(5,072.2)
Other assets less allowances	1,200.7	206.3	(994.4)
Total long-term assets	$10,155.2	$ 3,802.7	$ (6,352.5)
Total Asset	$27,667.8	$15,727.1	$(11,940.7)

APPENDIX VI

LIABILITIES			
Current			
Accounts payable	$ 2,941.0	$ 705.7	$ (2,235.3)
Advances received from others	26.5	116.2	89.7
Total current liabilities	$ 2,967.5	$ 821.9	$ (2,145.6)
Long-term			
Deposit fund liabilities	$ 67.9	$ 68.7	$ .8
Unfunded liabilities	735.1	4.3	(730.8)
Long-term debt	1,955.9	1,930.0	(25.9)
Total long-term liabilities	$ 2,758.9	$ 2,003.0	$ (755.9)
Other liabilities	$ 11,188.7	$11,499.4	$ 310.7
Total liabilities	$ 16,915.1	$14,324.3	$ (2,590.8)
GOVERNMENT EQUITY			
Unobligated spending authority	$ 12,667.5	$ 10,722.4	$ (1,945.1)
Obligations	1,572.1	153.3	(1,418.8)
Unfilled customers orders	(114.2)	(96.2)	18.0
Invested capital	(3,565.6)	(9,597.3)	(6,031.7)
Receipt account equity	192.9	220.6	27.7
Total government equity	$ 10,752.7	$ 1,402.8	$ (9,349.9)
Total liabilities and government equity	$ 27,667.8	$ 15,727.1	$(11,940.7)

VA'S STATEMENTS ON FINANCIAL POSITION FOR FISCAL YEARS ENDED SEPTEMBER 30, 1982, AND SEPTEMBER 30, 1983, AS PUBLISHED IN VA'S ANNUAL REPORT FOR FISCAL YEAR 1983

	Sept. 30, 1982	Sept. 30, 1983	Increase-(decrease)
ASSETS	----------(millions)----------		
Current			
Fund balances with Treasury	$ 5,111.5	$ 5,139.4	$ 27.9
Federal securities-at par	11,083.4	11,286.5	203.1
Accounts receivable less allowances	2,989.2	2,518.9	(470.3)
Other current assets	.4	.9	.5
Total current assets	$19,184.5	$18,945.7	$ (238.8)
	$ 158.9	$ 162.3	$ (3.4)
Long-Term			
Loans receivable	$ 1,288.4	$ 1,584.8	$ 296.4
Real property and equipment less allowances	6,363.8	$ 7,143.2	$ 779.4
Other assets less allowances	96.0	88.3	(7.7)
Total long-term assets	$ 7,748.2	$ 8,816.3	$1,068.1
Total assets	$27,091.6	$27,924.3	$ 832.7

LIABILITIES			
Current			
Accounts payable	$ 2,445.3	$ 2,121.0	$ (324.3)
Advances received from others	500.4	506.8	6.4
Total current liabilities	$ 2,945.7	$ 2,627.8	$ (317.9)
Long-Term			
Deposit fund liabilities	$ 56.7	$ 55.0	$ (1.7)
Unfunded liabilities	735.1	790.3	55.2
Long-term debt	1,730.1	1,730.1	0.0
Total long-term liabilities	$ 2,521.9	$ 2,575.4	$ 53.5
Other liabilities	$11,414.5	$11,699.5	$ 285.0
Total liabilities	$16,882.1	$16,902.7	$ (20.6)
GOVERNMENT EQUITY			
Unobligated spending authority	$ 9,410.1	$10,331.2	$ (921.1)
Obligations	37.8	38.9	(1.1)
Unfilled customer orders	.1	.1	.0
Invested capital	760.5	650.2	110.3
Receipt account equity	1.0	1.2	(.2
Total government equity	$10,209.5	$11,021.6	$ (812.1)
Total liabilities and government equity	$27,091.6	$27,924.3	$ (832.7)

CARE - BASED AUDIT METHODOLOGY FOR REVIEWING AND EVALUATING AGENCY ACCOUNTING AND FINANCIAL MANAGEMENT SYSTEM -- SECTION 5, RISK RANKING OF SYSTEMS*

Once the general risk assessment (GRA) segment is complete and the inventory of an agency's financial management systems has been established, the auditor will make an initial decision on the order in which the systems will be reviewed. In small agencies with only a few systems, that decision should not be difficult. In large agencies with numerous systems, however, a technique is needed to rank the systems in terms of their relative vulnerability to fraud, abuse, mismanagement, and failure to meet GAO's internal control standards and accounting principles and standards -- relative risk. A ranking process is especially useful for optimizing the use of audit resources in large agencies where it would be impractical to review all systems concurrently .

A ranking procedure cannot be absolutely precise because of the dependence that is necessarily placed on the auditor's judgment in both developing the ranking and in ultimately selecting systems for review. Nonetheless, the procedure prescribed below provides a systematic three-step approach to risk ranking.

--Evaluate each system in terms of certain risk factors (characteristics) and assign a numeric risk value for each of the factors: 3-high, 2-medium, 1-low.

--Assign an importance weight to each factor and compute a composite numerical score for each system.

*Excerpted from GAO's CARE Audit Methodology To Review and Evaluate Agency Accounting and Financial Management Systems, July 1985.

--Rank the systems in order of vulnerability based on the composite scores.

Details on each of these steps follows.

EVALUATING SYSTEMS IN TERMS OF RISK FACTORS

Numerous factors could be considered in determining a given system's vulnerability. Based on past audit experience, however, the 12 factors listed in the following pages should be considered in developing the ranking. The list is not meant to be all-inclusive but rather provides a reasonable means for accomplishing the ranking objective while expediting the review work.

It is not practical to develop exact criteria for assigning numeric risk values for each risk factor for every agency system and situation. However, broad guidelines can be provided. The guidelines discussed below require the use of professional judgment in assessing the risk associated with each factor and should be considered in relation to the information gathered in the general risk assessment.

The reasons for assigning high, medium, or low risk should be documented (see exhibit 5-1) to permit verification and allow another auditor to reach basically the same conclusions. The guidelines as well as the risk factors may be periodically revised as opportunities for improvement of the ranking procedure develop. The risk factors are not listed in order of importance.

APPENDIX VIII

A. Purpose of system. This risk factor considers the potential effect of a system not operating properly and failing to perform its intended function. Systems crucial to controlling the use of funds and other resources or operating the organization will generally be considered high risk because of the exposure to loss or disruption of operations. Systems accounting for other assets and liabilities may be ranked medium. Systems that only record and report summary financial data and are not crucial to operations may be ranked low.

B. System documentation. Complete and current system documentation, including a general system description, functional requirements, and data requirements, is needed to ensure proper system maintenance and operation. If little or no documenation is available, or evidence indicates that system changes have not been documented, the system should normally be ranked high. A system may be ranked low if it appears that appropriate emphasis has been given to fully documenting the system during its development and subsequent changes. A system may be ranked medium if the documentation is complete except for recent changes.However, if the recent undocumented changes were major system changes, a high-risk ranking would generally be warranted.

APPENDIX VIII

C. Dollar volume controlled by the system. The greater the dollar volume of assets or transactions controlled by a system, the greater the risk. However, the dollar value thresholds for determining high, medium, or low risk for a given system must be determined on a system-by-system basis considering each agency's total authority. For example, at one agency with $280 billion in budget authority, systems controlling $5 billion or more were ranked high, those controlling less than $150 million were ranked low.

D. Amount of system maintenance. Systems that have become outmoded or fail to consistently meet requirements frequently require a high degree of maintenance (such as system changes and modification) simply to keep them operational. Through discussion with agency systems personnel and examination of system maintenance logs, some assessment can be made to determine if the system should be ranked high due to a relatively large amount of maintenance in relation to the system's age. A system may be ranked low if the maintenance efforts expended appear minor or routine. As with dollar volume, exact risk thresholds cannot be specified and should be assessed for each system considering the total maintenance effort expended by the organization.

E. Verification of input. The risk associated with this factor decreases as the ability of a system to verify

the accuracy of input data increases. For example, a system may be considered:

--high risk if the input data is received only from sources outside the agency and its accuracy cannot be verified with agency-generated data,

--medium risk if the system receives input data from sources outside the agency but can independently verify the accuracy of the input with agency-generated data, or

--low risk if the input data is received from sources within the agency and the system can verify its accuracy with other agency-generated data.

F. Degree of automation. Completely manual systems are often considered highly vulnerable to fraud, abuse, and mismanagement because data may not be processed as consistently as in an automated system and because controls built into a manual system can be more easily overridden than in a well-designed and implemented automated system. On the other hand, fully automated, on-line systems may be very difficult to control because of the speed with which files are changed and the lack of documents showing the results of processing.

Completely manual systems or systems combining manual and automated processes in which the automated processes cannot fully verify the results of manual processing may be ranked high because individuals

APPENDIX VIII

could randomly circumvent processing procedures and manual controls. Often, in such cases, transactions go through several manual processes before being entered into the computer. Collections--for example--often undergo manual processing in the mail room and several accounting branches. Systems combining manual and automated processes in which automated processes can fully verify the results of manual processing may be ranked medium because the automated processes act as a check on the results of manual processing and can detect random circumvention of manual controls and inconsistent processing of information. Fully automated systems, for which the results of processing could be verified by other automated systems, may be ranked low.

G. Number of other dependent systems. The operation of a given system may be essential to the successful operation of others. As such, a system may be ranked high if it has several dependent systems, medium if it has only one dependent system, or low if its operation has no bearing on the operation of other systems.

H. Amount of computer resources used. High use of computer resources can provide indications of systems that are (1) used extensively because of their importance to the organization's operation, or (2) inefficient. In either case, such systems would be ranked high. Conversely, systems requiring little computer

resources may be ranked low. This is another factor that is not easily quantified and must be judged in relation to each organization's total computer resources.

I. Known system problems. By considering unresolved audit findings and the results of consultant studies and internal management reports reviewed in the general risk assessment, the auditor can determine the existence of any previously identified significant system problems--those that preclude the system from meeting its stated goals--that warrant a high-ranking. The system may be ranked medium if the known problems would not prevent the system from meeting its goals or low if no problems have been previously identified.

J. Recency of audit. Systems that have never been audited should be ranked high, while those that have had comprehensive or full-scope audits within the past 2 years generally may be ranked low. Systems with limited scope audits or audits that were performed between 2 and 5 years ago should be ranked medium. An additional consideration in assessing vulnerability under this factor is whether the system is known to have been changed significantly since the most recent audit was completed. If so, the system may be ranked high.

K. Statutory requirements met. Some systems may be depended on to allow an organization to meet certain

statutory requirements, such as provisions of the Prompt Payment Act or the Anti-Deficiency Act. If the system does not operate properly, the organization may be in violation of law. Only two levels of risk are associated with this factor: high, if the system is relied on for compliance with statutes, or low, if no connection to statutory requirements exists.

L. Involvement of users and auditors in systems design. Assurance is generally greater that a system is properly designed and adequate internal controls are incorporated if the system users and independent auditors actively participated in the system's design and implementation. A system for which such participation took place would be ranked low. If only the users or the auditors participated, the system would be ranked medium. A high-risk ranking would be given for this factor if neither the users nor the auditors participated.

ASSIGNING WEIGHTS TO RISK FACTORS AND COMPUTING COMPOSITE SCORES

Weights are assigned to each ranking factor based on their relative importance in assessing risk. The weights shown below were developed by rating each factor in order of importance on a scale of 1 to 5 based on prior experience in reviewing accounting systems and internal controls.

APPENDIX VIII

	Factor	Weight
A.	Purpose of system	4.4
B.	System documentation	4.3
C.	Dollar volume controlled by the system	4.4
D.	Amount of system maintenance	3.9
E.	Verificatin of input	4.4
F.	Degree of automation	3.8
G.	Number of other dependent systems	4.5
H.	Amount of computer resources used	3.2
I.	Known system problems	3.7
J.	Recency of audit	3.8
K.	Statutory requirements met	4.5
L.	Involvement of users and auditors in system design	4.0

Different weights could be developed for a specific organization provided the weights are used consistently in ranking the systems.

To develop a composite score for each system, the weights are multiplied by the risk ranking values and the products totaled, as shown in the following example.

Risk Factor	Numeric Risk Value	Weight	Composite Score
A	3	4.4	13.2
B	2	4.3	8.6
C	2	4.4	8.8
D	1	3.9	3.9
E	3	4.4	13.2
F	3	3.8	11.4
G	2	4.5	9.0
H	1	3.2	3.2
I	3	3.7	11.1
J	2	3.8	7.6
K	1	4.5	4.5
L	2	4.0	8.0
		TOTAL:	102.5

RANKING SYSTEMS
IN ORDER OF RISK

Using the composite scores, the systems are listed in descending order so that they may be categorized according to their relative vulnerability to fraud, abuse, and mismanagement. The ranking factors are primarily geared to automated systems. For completely or partially manual systems, some of the factors may not be applicable. To make the composite scores for those systems comparable to the scores for which all factors are applicable, the following procedure may be used:

--Divide the system's composite score by the number of factors on which the system was assesssed to develop an average for each factor. For example, if the composite score is 110 and only 10 of the 12 factors were applicable to the system, the average for each factor would be 11.

--Multiply the average for each factor computed above by 12 (the total number of factors prescribed for the ranking system). The resulting revised composite score could then be used for that system in ranking it with the other systems.

APPENDIX VIII

KEY POINTS

The ranking technique provides a systematic approach to estimating the relative vulnerability of an organization's financial management systems. Once the ranking process is complete, two products can be developed: a report advising management of the systems considered high risk, and an audit plan for reviewing the systems in order of priority. The final audit plan should consider any special circumstances that would justify not reviewing a high-risk system, such as if the system will be replaced or otherwise discontinued in the near future. The rationale for not reviewing any high-risk system should be fully documented in the audit plan. A more conclusive statement on each system's vulnerability can be made after performing the transaction flow review and analysis described in the following section

EXHIBIT 5-1

WORKSHEET FOR PREPARING SYSTEMS RISK RANKING SCORES

Factor	Risk (3-high 2-med 1-low)	X	Weight	=	Composite score	Explanation for risk assigned: (use sufficient space to fully describe)
A. Purpose of system	____		4.4		____	
B. System documentation	____		4.3		____	
C Dollar volume controlled by the system	____		4.4		____	
D. Amount of system maintenance	____		3.9		____	
E. Verification of input	____		4.4		____	
F. Degree of automation	____		3.8		____	
G. Number of dependent systems	____		4.5		____	
H. Amount of computer resources used	____		3.2		____	
I. Known system problems	____		3.7		____	
J. Recency of audit	____		3.8		____	
K. Statutory requirements met	____		4.5		____	
L. Involvement of users and auditors in system design	____		4.0		____	
TOTAL					____	

APPENDIX VIII

AUTOMATED FINANCIAL MANAGEMENT SYSTEMS THAT SUPPORT THE VETERANS ADMINISTRATION'S FINANCIAL MANAGEMENT STRUCTURE

Financial management function and system name	Description of system	System schedule for redesign
Development of plans and programs:		
Annual Patient Census File[a]	provides medical and administrative information on a cross-section of VA patients	
Construction Program Planning System[a]	maintains updated 5-year construction project planning list of all VA construction projects and support preparation of annual budget requests submitted to OMB and the Congress	
Patient Treatment File[a]	maintains a record of individual bed-patient care received in VA and non-VA facilities at VA expense	
Space and Functional Deficiency Identification System[a]	provides information on facility deficiencies characteristics and planned construction projects for use in facility planning and development of agency plans and annual construction budget request	
Formulation and presentation of the budget:		Yes
Automated Budget System	records and reports budget submissions by VA organizational components	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
Budget System Construction Obligation Outlay System	records and reports obligations and outlays for construction projects, and is used to prepare and present VA's budget request for construction projects	
Construction Cost Analysis System[b]	provides information to support development of construction project cost estimates, and is used to develop requests for staff requirements.)	
Automated Management Information System (AMIS)[c]	collects, records, and reports summary information on the financial results of program and administrative operations on a VA-wide basis (AMIS is the main VA system to develop annual budget requests.)	Yes
Resources Management Accounting System	provides the director of the Office of Data Management and Technology with productivity data on work units in the six VA-wide computer centers and provides information on work units accomplished and staff resources used	
Budget execution and accounting for the financial results of program and administrative operations:		
Centralized Accounting for Local Management (CALM) Depot System	maintains general ledger accounts for Supply Fund Operations at VA medical supply depots	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
Centralized Accounting for Local Management (CALM) System	processes all financial transactions relating to VA's administrative expense appropriations--e.g. salaries, supplies expense, and utilities, maintains general ledger accounts for VA's administrative expense appropriations, also prepares magnetic tapes sent to the appropriate Treasury Regional Disbursing Office to initiate preparation and issuance of checks to vendors	
General Ledger System (GLS)	maintains the general ledger accounts for VA mortgage loan programs (GLS receives transaction information in machine-media records from the Portfolio Loan System, Liquidation and Claims System, and Property Management System. It also processes manually generated transactions relating to allotments, interoffice fund transfers, accruals, and reversing entries.)	
Depot Fiscal General Ledger Cost Accounts (DEPGLCA) System[a]	maintains depot cost accounting records and prepares journal entries to be posted to the depot general ledger accounts maintained by the CALM Depot System	
Nationwide Consolidated System	records summary general ledger account information and produces consolidated VA financial reports	

Financial management function and system name	Description of system	System schedule for redesign
Personnel and Accounting Integrated Data (PAID) System	VA's centralized personnel/payroll system which maintains central personnel and payroll, master files, computes the biweekly payroll, prepares magnetic tapes sent to the Treasury Regional Disbursing Office for preparation and issuance of checks, prepares statistical reports, and maintains cost and general ledger accounts for payroll expenditures	Yes
Centralized Accounting System for Construction Appropriations (CASCA) System	maintains general ledger accounts for VA's construction appropriations	
Summary of Benefit Payments (SBP) System	maintains general ledger accounts for VA benefit payments under the compensation, pension, and education benefit programs (The SBP system maintains accounts by benefit program appropriations and by entitlement category. It provides infomation to the Nationwide Consolidated System.)	
Cost Accounting System	records and reports program and administrative cost information by field installations, medical districts and VA-wide, provides information to central office staff offices, Department of Veterans Benefits, Department of Medicine and Surgery,	

Financial management function and system name	Description of system	System schedule for redesign
	Office of Data Management and Telecommunications, and Office of Budget and Finance	
Trail Balance - General Ledger System	produces a VA-wide general ledger trial balance	
Statements of Transactions System	reconciles payment information recorded in the Department of Treasury's Central Accounting System with payment information recorded in VA's general ledger systems and reported to Treasury	
Automated Allotment Control System	records and controls the allotment of appropriated VA funds approved by the Congress to the various VA organizational components and facilities and produces listings and transfer of disbursing authority	Yes
Supply Fund Profit Loss System	prepares financial reports on the results of operations of VA's supply fund	Yes
Interoffice Accounts System	produces analyses of transfer of fund transactions between VA facilities	
Receivables and Payables System	maintains detailed subsidiary ledger accounts for receivables and payables related to VA supply fund operations and produces analyses of accounts receivable and payable to focus management attention on collection and payment problems	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
Reserve for Depreciation System	maintains detailed subsidiary ledger accounts on depreciation of equipment used by VA's Supply Fund's printing and reproduction activity	
Life Cycle Cost (LCC) System	maintains detailed subsidiary ledger accounts on depreciation for VA construction projects	
Central Accounts Receivable System (CARS)	maintains detailed subsidiary ledger accounts for receivables resulting from overpayments made under the compensation, pension, education, and loan guarantee benefits programs (The system supports VA's debt collection process.)	
Central Accounts Receivable On-Line System (CAROLS)	provides direct access by computer terminals and telecommunications lines to the CARS files	
Automated Pharmacy Information System (APIS)	maintains detailed subsidiary ledger records of drug inventories for selected VA pharmacies and records and controls drug usage	
Prosthetics and Sensory Aids System	maintains detailed subsidiary ledger records of prosthetic devices, accessories, and sensory aids inventories stocked by VA prosthetic centers and records and controls usage	

Financial management function and system name	Description of system	System schedule for redesign
Integrated Procurement, Storage, and Distribution System (LOG I)[a,d]	maintains detailed subsidiary ledger records for expendable and nonexpendable property stocked and managed by VA's Supply Fund and other appropriations (The system records and controls the use of expendable and nonexpendable personal property.)	Yes
Consulting and Attending Physcians (C&A) System	computes fees due consulting and attending physicians, records fees paid, and prepares magetic tapes for fees that are sent to the appropriate Treasury regional disbursing office for preparation and issuance of checks	
Beneficiary Identification and Records Locator Subsystem (BIRLS)[a]	supports determination of individual veteran eligibility for benefits and maintains detailed records on individual veterans to include the veteran's verified military service information, VA benefits applied for and received, current marital status, and official file folder location BIRLS is used to: —assign veteran claim numbers (the VA's equivalent of a Social Security number), —process notices of death,	Yes

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
	—locate official file folders, —control transfer of file folders between VA offices, —provide eligibility information to other VA systems, and —store and maintain management and statistical information.	
Veterans Assistance Discharge System (VADS)[a]	maintains detailed records for individual veterans on their military service (This information is received from the armed services. This system is used to update BIRLS and to notify individual veterans of their potential entitlement to benefits.)	
Fee Basis Medical and Pharmacy System	processes transactions to authorize medical care and services from private health care providers on a fee basis, authorizes fee basis health care, maintains detailed records on fee basis health care provided, records manually computed payment amounts, and issues fees to private health care providers	
Reinstatement Entitlement Program for Survivors (REPS) System	processes claims for benefits under P.L. 97-377 Section 156, Reinstated Entitlement Programs for Surviors, determines claimants'	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
	eligibility for benefits, authorizes benefits, and makes benefit payments through the appropriate Treasury Regional Disbursing Office	
Compensation and Pension (C&P) System	processes claims for compensation and pension benefits, verifies claimants' eligibility for benefits, computes benefit amounts, maintains detailed records on claims and payments made, and produces a magnetic tape sent to the appropriate Treasury Regional Disbursing Office to effect preparation and issuance of benefit checks	Yes
Education System - Chapter 34/35 Benefits	processes claims for chapter 34/35 education benefits, maintains detailed records on benefit payments, produces reports on benefit payments, and makes benefit payments through the appropriate Treasury Regional Disbursing Office	
Education System - Chapter 32 Benefits	processes claims for chapter 32 education benefits, maintains detailed records on benefit payments, produces reports on benefit payments, and makes benefit payments through the appropriate Treasury Regional Disbursing Office	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
Vocational Rehabilitation and Education (Chapter 31) System	processes awards for chapter 31 vocational rehabilitation and education participants, maintains current records on benefit payments, produces reports on benefit payments, and makes benefit payments through the appropriate Treasury Regional Disbursing Office	Yes
Chapter 32 Banking System	maintains detailed subsidiary ledger account records for active members of the military services on their deposits and Department of Defense's contributions to their individual education fund accounts	
Manilla Compensation and Pension (C&P) Payment System	processes claims for compensation and pension benefits, computes benefit amounts, maintains detailed records on claims and payments made, and produces a magnetic tape sent to the appropriate Treasury Regional Disbursing Offices to effect issuance of benefit checks for veterans residing in the Phillipines	
Compensation Pension and Education (CP&E) On-Line System	provides direct access to compensation, pension, and education benefit systems' master files through computer terminals and telecommunications lines	

Financial management function and system name	Description of system	System schedule for redesign
Nonreceipt of Benefit Checks (NBC) System	processes veterans' claims concerning nonreceipt of compensation and pension benefit checks and updates the Compensation and Pension System	
DL/LG Funds Applied and Provided (PFISFAAP) System	records transaction information and maintains detailed records on monthly operating plan data, fund management, and projections of future budget amounts for direct loan and loan guarantee funds	
Guaranteed and Insured Loan (GIL) System	records transaction information and maintains detailed records on the volume and characteristics of loans secured by veterans from private financial institutions and guaranteed or insured by VA	Yes
Liquidation and Claims System (LCS)	records transaction information and maintains detailed subsidiary ledger records on (1) defaults on loans to veterans, (2) liquidations of loans to veterans, and (3) claims on outstanding veteran loans (It also records and reports on defaults and claims for repurchase on sold vendee accounts and certain direct loans sold with specific repurchase agreements. LCS supports and updates general ledger control accounts in the General Ledger System.)	

Financial management function and system name	Description of system	System schedule for redesign
Portfolio Loan System (PLS)	records transaction information and maintains detailed loan records for VA portfolio loans (It accounts for the loans, processes collections on loan repayments, controls individual loans, and produces management, accounting, and statistical reports. It also supports and updates general ledger control accounts in the General ledger system.)	
Property Management System (PMS)	records transaction information, maintains detailed subsidiary ledger records on and controls real estate acquired by VA as a result of veterans' defaulting on VA guaranteed and direct mortgage loans (VA portfolio loans) (The system records, reports, and controls information on property acquisitions and sales. It also initiates and controls payment of real estate tax bills on VA owned properties. The records maintained by this system support general ledger control accounts in the General Ledger System.)	
Insurance System (INS)	records and controls transaction information, maintains detailed subsidiary ledger accounts, and maintains summary general ledger accounts for the	Yes

APPENDIX IX

Financial management function and system name	Description for system	System schedule for redesign
	VA's five life insurance funds for which VA functions as a life insurance company	
Veterans Mortgage Life Insurance (VMLI) System	records and controls transactions information and maintains detailed accounting records on policies of mortgage life insurance on a group basis for eligible veterans	
Card and Paper Order (CAPOR)	maintains detailed records on (1) commodity and distribution data and (2) vendor and bidder lists to support VA procurements of ADP punched cards and paper	
Office of Administration Tracking System (OATS)	maintains detailed records on and tracks VA Forms 2237—purchase requisitions—and VA Forms 2138—purchase orders—for purchases initiated in VA's Washington, D.C., central office	
Critical Path Method System	records and tracks progress of individual construction project and issues progress payments to contractors	
Wage Automated Generated Evaluation System (WAGE)[a]	records, sorts, edits, and tabulates wage data for analysis and setting pay rates for prevaling rate employees under the Federal Wage System (The system calculates, formats,	

Financial management function and system name	Description of system	System schedule for redesign
	and prints final FWS schedules and automatically updates the PAID System's files. The PAID System is VA's central personnel/ payroll system.)	
Engineering Management Information System[a]	records and reports information to assist medical center engineers schedule and records preventive maintenance, maintains records on the maintenance and repair of equipment, and tracks labor and material costs	
Non-Recurring Maintenance Program (NRM) System[a]	records and reports information to support (1) allotting funds to VA medical centers and medical districts, (2) tracking certain construction projects, and (3) providing clerical and management support to the VA Central Office Engineering Service Staff	
TARGET Inventory and Maintenance Subsystem	records and reports information on TARGET contracts administration, TARGET invoice verfication and certification, and TARGET maintenance order renewals, claims, damages, and credits	
Tracking Resource Information Management[a]	records and reports information on ADP system projects managed by the Office of Data Management and Telecommunications, as well as the costs of each project	

APPENDIX IX

Financial management function and system name	Description for system	System schedule for redesign
Utilization Reporting System	records and reports information on computer utilization	
Federal Assistance Awards System	produces a quartely report required by the Office of Management and Budget on VA financial assistance transactions which must be reported by geographic area	
Utilization and Disposal of Excess/Surplus Personal Property System[a,d]	produces an annual report required by the General Services Administration on the utilization and disposal of excess/surplus personal property	
Audits and evaluations:		
Service Summary System (formerly the Financial Management System)	records and reports information at the indiviual facility level and summary level on costs and productivity for Department of Memorial Affairs and Department of Medicine and Surgery facilities	
Report of Remuneration for Outside Professional Activities System[a]	records and reports information on comparisons with previous years' outside professional activities as an assessment of the impact of PL 94-123 special pay provisions on VA recruitment and retention of physicians and dentists	

APPENDIX IX

Financial management function and system name	Description of system	System schedule for redesign
Hospital Based Home Care (HBHC) System	records and reports information on admission, treatment, and discharge of extended care patients, which is used to evaluate the HBHC program	

[a]VA disagrees with our classification of the systems as financial management systems.

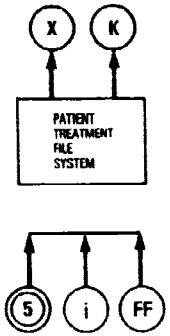
[b]This system has been inactive for about 2 years, but it may be reactivated in fiscal year 1987.

[c]In commenting on the report, VA stated that AMIS is being enhanced, but not totally redesigned.

[d]The Utilization and Disposal of Excess/Surplus Personal Property System has been incorporated into the Integrated Procurement, Storage, and Disposition System.

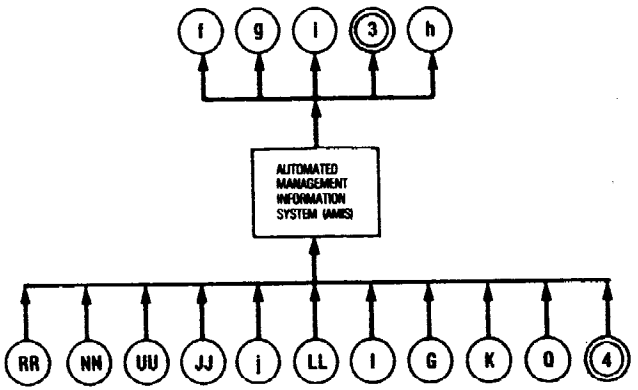
VA FINANCIAL MANAGEMENT SYSTEMS

DEVELOPMENT OF PLANS AND PROGRAMS FUNCTION



(5) The Patient Treatment File System Receives Information From the Summary of Hospital Information Patient System a Non-Financial Management Information System

BUDGET FORMULATION AND PRESENTATION FUNCTION



(3) AMIS Provides Information to the Staff Management Program, a Non-Financial Management System.

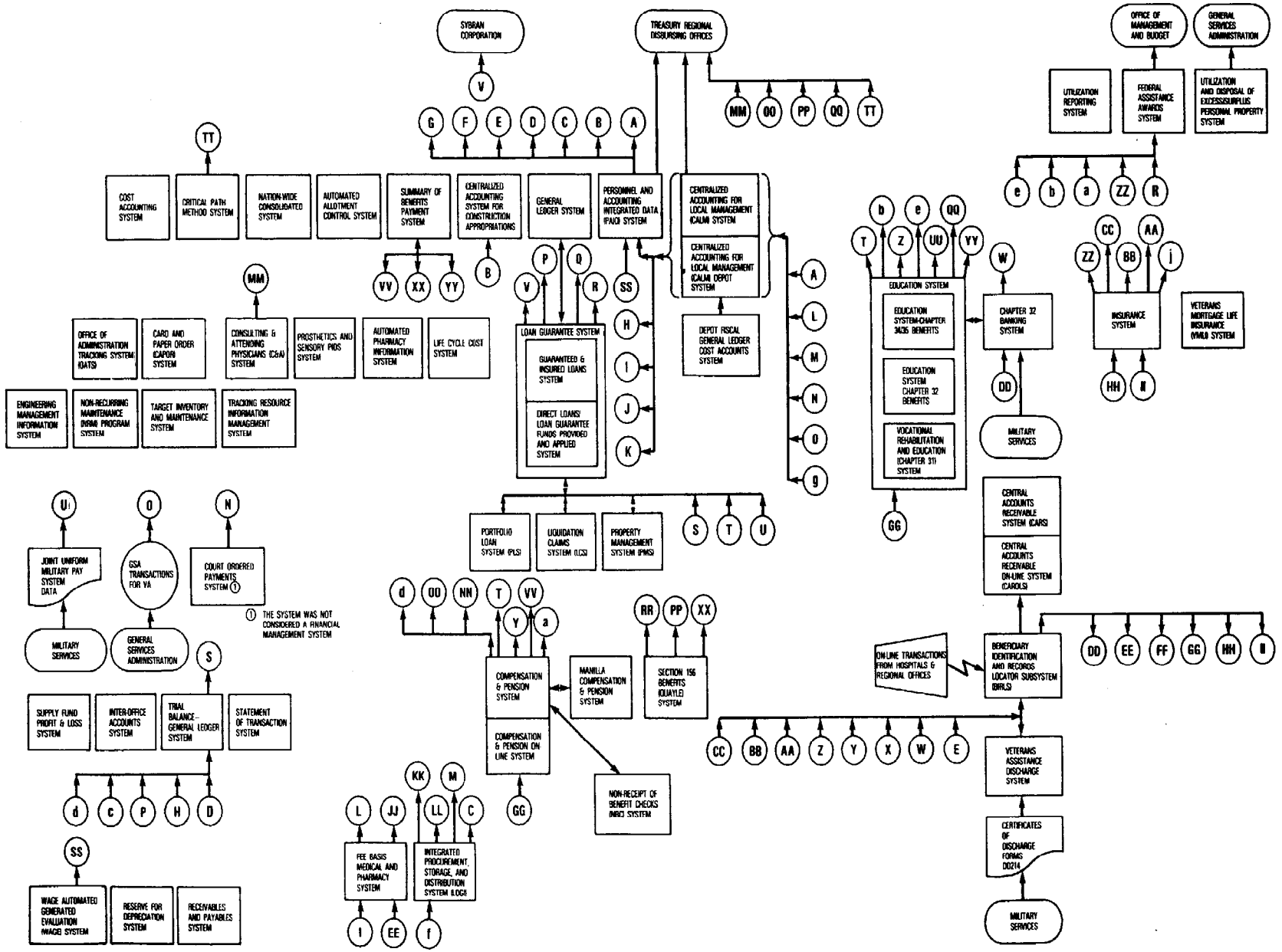
(4) AMIS Receives Information From the Following Non-Financial Management Information Systems:
- Rental Activity System
- Outpatient Staff System
- Social Work Service System
- Veterans Administration Voluntary Service System

APPENDIX X

APPENDIX X

VA FINANCIAL MANAGEMENT SYSTEMS

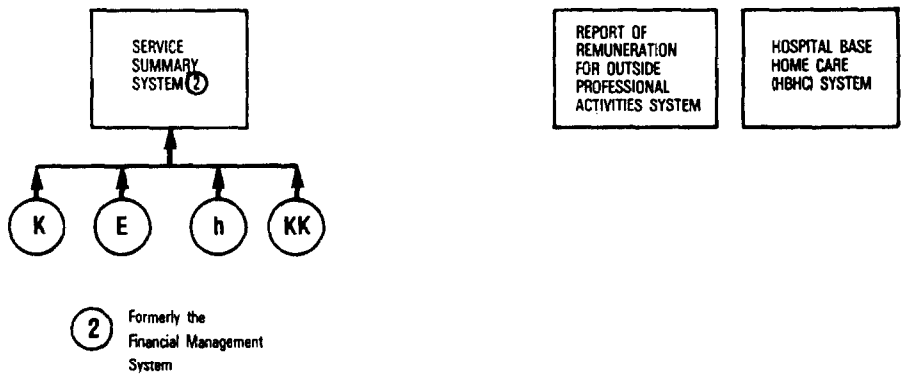
BUDGET EXECUTION AND ACCOUNTING FUNCTION



APPENDIX X

VA FINANCIAL MANAGEMENT SYSTEMS

AUDITS AND EVALUATIONS FUNCTION



VETERANS ADMINISTRATION FINANCIAL MANAGEMENT SYSTEMS, FISCAL YEAR 1983: FINANCIAL RESOURCES CONTROLLED AND SYSTEMS SCHEDULED FOR REDESIGN

Financial management function and system name	Fiscal year 1983 financial resources controlled (thousands)	System scheduled for redesign
Development of plans and programs:		
Annual Patient Census File	a	
Construction Program Planning System	a	
Patient Treatment File	a	Yes
Space and Functional Deficiency Identification System	a	
Formulation and presentation of the budget:		
Automated Budget System	a	Yes
Budget System Construction	a	
Obligation Outlay System	a	
Construction Cost Analyses System	a	
Resource Management Accounting System	a	
Automated Management Information System	a	Yes
Budget execution and accounting for the financial results of program and administrative operations:		
CALM Depot System	$ 635,000[b]	
CALM System	2,357,734[b]	
General Ledger System	931,986[b]	
Depot Fiscal General Ledger Cost Accounts System	-	
Cost Accounting System	a	
PAID System	5,685,987[c]	
Centralized Accounting System for Construction Appropriations	738,391[b]	

APPENDIX XI

Financial management function and system name	Fiscal year 1983 financial resources controlled (thousands)	System scheduled for redesign
Summary Benefit Payments System	$16,017,933[b]	
Automated Allotment Control System	a	
Nationwide Consolidated System	1,908,716[b]	
Trial Balance-General Ledger System	a	
Statement of Transactions System	a	
Supply Fund Profit and Loss Statement	a	
	$28,275,747[b]	
Central Accounts Receivable System (CARS)[d,e]	$ 876,900[f]	Yes
CARS On-Line System[d]	23,200[f]	
Automated Pharmacy Information System		
Prosthetics and Sensory Aids System		
Integrated Procurement Storage and Distribution System		
Receivables and Payables System[e]		
Liquidation and Claims System	765,366[f]	
Portfolio Loan System	371,837[f]	
Property Management System	765,366[f]	
Insurance System	30,362,154[f]	Yes
Reserve for Depreciation System	a	
Life Cycle Cost System	a	
Chapter 32 Banking System	544,100[f]	
Beneficiary Identification and Records Locator Subsystem (BIRLS)	24,696,654[g]	Yes
Veterans Assistance Discharge System		Yes
Fee Bases Medical and Pharmacy System	502,640[f]	
Reinstatement Entitlement Program for Surviviors (REPS) System		
Compensation & Pension System[h]	14,013,703[f]	Yes
Education System--Chapter 34/35 Benefits	1,990,350[f]	
Education System--Chapter 32		
Vocational Rehabilitation and Education (Chapter 32) System	1,060[f]	Yes
Manilla Compensation and Pension Payment System[h]	-	

Financial management function and system name	Fiscal year 1983 financial resources controlled (thousands)	System scheduled for redesign
Compensation, Pension, and Education On-Line System	a	
Non-Receipt of Benefit Checks System	a	
Guaranteed and Insured Loan System	a,i	Yes
Veterans Mortgage Life Insurance System	a	
Direct Loan/Loan Guarantee Funds Applied and Provided System	a	
Card and Paper Order System	a	
Office of Administration Tracking System	a	
Critical Path Method System	738,391[f]	
Wage Automated Guaranteed Evaluation System	a	
Engineering Management Information System	a	
Non-Recurring Maintenance Program System	a	
TARGET Inventory and Maintenance Subsystem	a	
Tracking Resource Information Management System	a	
Consulting and Attending Physicians System	a	
Utilization Reporting System	a	
Federal Assistance Awards System	a	
Utilization and Disposal of Excess/ Surplus Personal Property System	a	
Audits and evaluations:		
Service Summary System	a	
Report of Remuneration for Outside Professional Activities System	a	
Hospital Based Home Care (HBHC) System	a	Yes

[a]These systems process financial information and support VA's overall financial management function, but they do not include specific controls to help (1) preclude violations of the Anti-Deficiency Act or (2) ensure the propriety of payments or use of resources.

[b]These general ledger systems include controls to prevent VA from breaching its congressionally imposed spending limits and to preclude consequent violations of the Anti-Deficiency Act. These systems, however, do not include controls to ensure the propriety of individual disbursements or use of resources.

[c]The PAID System, in addition to providing for administrative control over VA's spending authority for personnel expenses, also includes controls to ensure the propriety of individual salary payments.

[d]CARS On-Line System is part of the main CARS system.

[e]The amount of accounts receivables and payables are included in the dollar amount shown for CARS.

[f]These systems either control specific assets and liabilities or authorize, compute the amount of, and initate the prepartion and issuance of checks for payments under VA's various benefit payment programs. These systems include controls to help (1) protect VA's resources from fraud, waste, and mismanagement and (2) ensure that VA only makes payments to eligible persons and that payments are proper.

[g]BIRLS and the Veterans Assistance Discharge System maintain VA's central records on veterans' eligibility to receive benefit payments and health care. Consequently, these two systems are key in ensuring the propriety of benefit payments and use of resources.

[h]The amount of disbursements controlled by Manilla Compensation and Pension System is included in the $14,013,703 shown for thecompensation and pension system.

[i]The Guaranteed and Insured Loan System maintains memorandum accounts on $125,824,774,000 worth of loans veterans have secured from private financial institutions for which VA is guarantor to the private financial institutions.

APPENDIX XII

SUMMARY OF RESULTS OF GAO'S SURVEY OF GENERAL ADP CONTROLS AT THREE VETERANS ADMINISTRATION COMPUTER CENTERS

	Austin, Texas, computer center			Hines, Illinois, computer center			Philadelphia, PA, computer center			All computer centers surveyed		
	Adequate controls	Inadequate controls	degree of risk	adequate controls	inadequate controls	degree of risk	adequate controls	inadequate controls	degree of risk	Adequate controls	Inadequate controls	Degree of Risk
Organization and Management of the computer center												
Definition and communication of responsibilities	X			X			X			X-3 centers		
Segregation of duties	X			X				X	Medium	X-2 centers	X-1 center	Medium
Security		X	High	Not evaluated			X			X-1 center	X-1 center	High
Application system development												
Management and user involvement and approval	X			X				X	Medium	X-2 centers	X-1 center	Medium
Testing and conversion standards	X			X				X	High	X-2 centers	X-1 center	High
Documentation standards	X			X			X			X-3 centers		
Restricted access to application system documentation		X	Medium		X	Medium		X	High		X-3 centers	Medium
Application system maintenance												
Authorization and approval of system changes		X	Medium		X	High		X	Medium		X-3 centers	Medium
Testing of application system changes		X	Medium	X				X	High	X-1 center	X-2 centers	Medium/high
Restricted access to application programs and Related Documentation		X	High		X	High		X	High		X-3 centers	High
Computer center operations												
Formal operations procedures	X			X			X			X-3 centers		
Supervision and review of operations	X			X			X			X-3 centers		
Restricted access to computer operations		X	Medium	X				X	Low	X-1 center	X-2 centers	Low/Medium
Authorizations and approval of modifications to system software		X	Low	X				X	Medium	X-1 center	X-2 centers	Low/Medium
Testing of system software modifications		X	Medium	X			X			X-2 centers	X-1 center	Medium
Restricted access to system software		X	High	X				X	High	X-1 center	X-2 centers	High
Quality of system software and related documentation		X	Low	X			X			X-2 centers	X-1 center	Low
Centralized data control and entry												
Acceptance of all (and only) approved input	X			X				X	High	X-2 centers	X-1 center	High
Accurate data conversion	X			X				X	High	X-2 centers	X-1 center	High
Restricted access to data	X			X			X			X-3 centers		
Data communications (on-line systems)	X			X			X			X-3 centers		
On-line systems	N/A			X			X			X-2 centers		
Internal audit of computer center operations												
Adequacy of scope of internal audits		X	High	Not evaluated				X	Medium		X-2 centers	Medium/high
Back-up and off-site storage of data and programs												
Disaster recovery procedures	X		Medium	X			X			X-3 centers		
Back-up of key data and programs		X	High		X			X	Medium	X-1 center	X-2 centers	Medium/high

VETERANS ADMINISTRATION
DEPARTMENT OF MEDICINE AND SURGERY
AUTOMATED SYSTEM DEVELOPMENT PROJECTS
PLANNED FOR THE 5-YEAR PERIOD,
FISCAL YEARS 1985-1989

VA's Department of Medicine and Surgery has 17 automated application system development projects planned for the 5-year period fiscal, years 1985-1989. A brief description of these projects follows.

Application system project	Project description
Decentralized Hospital Computer Program (DHCP)	DHCP is a hospital management information system designed to support health care operations at VA hospitals. DHCP consists of a series of subsystems or modules designed by personnel in various VA hospitals. The systems will be field-tested in selected hospitals. DHCP currently includes four major modules: —patient registration; —patient admission, transfer, and discharge; —patient scheduling; and —outpatient pharmacy. Modules for inpatient pharmacy, clinical laboratory, and other clinical and administrative operations will be added to DHCP at later dates.
Integrated Hospital System (IHS)	The IHS is a commercially available hospital management information system designed to support health care operations at selected VA hospitals. IHS is being test-operated at selected hospitals. Currently, VA is operating two commercial hospital management information

APPENDIX XIII

	systems at selected VA medical centers. They are the automated Hospital Information System and the Honeywell Patient Care System.
Department of Medicine and Surgery (DM&S) Management Information System Design	The system will be designed to provide DM&S top managers and VA medical center managers with the information needed to make medical resource management and policy decisions. It will provide for immediate reporting of clinical and hospital operating information and will consolidate disparate management reporting systems to eliminate redundant, inaccurate data and ambiguous reporting requirements. The system will exchange information with other VA systems like DHCP, New Patient Treatment File, PAID Payroll, and Centralized Accounting for Local Management (CALM) systems.
Information and Training System for Continuing Education (ITSCE)	The system at each Regional Medical Education Center (RMEC) and the Continuing Education Center (CEC) site will consist of a PDP 11/44 processor, disk storage, mark-sense reader, and video and printing terminals. The system will run under the MUMPS operating system with information projects using the VA File Manager for data base applications. The system will enable the RMEC's and the CEC's to improve management of continuing education field operations and resources, and will enable RMECs to conduct ADP continuing education and training activities for VAMC health care personnel.
Medical Equipment Reporting System (MERS)	MERS is a distributed applications system designed to provide both local ADP support and linkage to a centralized data base. The system will provide automated support for managing the $1 billion of technical medical equipment installed systemwide. MERS software development is complete. MERS will be a statistical data base of the quality and performance of equipment by brand and model. In addition, safety hazard warnings can be made quickly to all

APPENDIX XIII

medical centers. Microcomputers located in all VAMCs will also provide support for work management and preventive maintenance scheduling. RFP for the system design and development was issued in fiscal year 1984.

Intensive Care Planning Model

Through efforts to revise current space planning criteria for intensive care, the need to resolve major policy and program issues became apparent. A task force under the leadership of Professional Services was formed and is in the process of revising the intensive care program guide to meet the immediate need for a current planning base. This project will study the provision of intensive care in VA, the relationship of intensive care to other modalities of care, and the factors which affect program size and operation. The intensive care planning model project will provide an information base and a methodology which will permit a more quantitative approach to program planning, facility planning, and policy analysis.

Space Classification Methodology

The agency maintains a detailed inventory of space assignments at all medical centers. The current classification and coding scheme for these data does not permit analysis or research associated with program planning, facility planning, or space planning criteria development. This project will develop a space classification and coding methodology that will identify both type and use of space in a manner which will support local space management needs and systemwide research and analysis. A method to reclassify and use existing data will also be developed.

APPENDIX XIII

Space Planning Criteria Determinants

Space planning criteria are the basis of facility planning in that they provide the mechanism to translate program levels into facility requirements. To date, space planning criteria for individual medical center functions are developed through independent projects. The determinants used in each set of criteria are tailored specifically for the function involved, and, therefore, vary for each function. These determinants may include patient census, staffing, counts of beds, visits, tests, items, etc. Translation from the results of MEDIPP and resource allocation methodologies is often difficult and sometimes impossible. This project will examine data being developed through MEDIPP, possible resource allocation models, and various medical center classification schemes to see if a general model of space needs determination can be developed consistent with DM&S program and resource planning processes.

Surgical Space Management Information System

As a result of a General Accounting Office study of surgical space planning criteria, the agency committed itself to developing an improved methodology for determining facility requirements for surgery. Independently, VAMC Ann Arbor began a project to improve scheduling and utilization of their surgical suite. Through a joint effort, this project will provide a system for improved local program management, an information base, and improved methodologies for program and facility planning, including data to support revisions to surgical space planning criteria.

Geriatric Research, Education, and Clinical Center (GRECC) System

This system is in the planning stage. Information is required to support the planning, administration, and evaluation of the GRECC program in selected VA hospitals.

APPENDIX XIII

Audio/Visual Nurse Call Systems	A centralized nurse call system is a telecommunications system which provides two-way voice communication between patients and nursing personnel. All patient calls are received by a central operator who directs the appropriate level of care to the patient. This will allow the most effective use of available skills.
Non-Recurring Maintenance Program (NRM)	NRM provides support for the management of planned maintenance projects (all projects which are overseen by DM&S - does not include major projects managed by Office of Construction). The system is an inventory of all projects and includes their status and estimated resources. NRM enables Central Office management to allot funds to VAMCs and to medical districts according to need and DM&S priorities. NRM supports tracking the progress of construction and provides support to clerical and professional staff.
Spinal Cord Injury Registry (SCI) System	This system will maintain a registry of all VA spinal cord injury patients. This registry will record a complete patient hisotry from first admission to a VA hospital through the patient's death.
Automated Procurement System	The system is being designed to automate production of purchase orders for replenishment of stock and unposted items, to maintain a Bidder's Mailing List and a Product/Service Index, to integrate with Fiscal Service to automate the obligation of orders by control point, to automate the preparation of various types of solicitations and contracts, and to generate management reports.

APPENDIX XIII

Veterans Canteen Service Accounting System	The financial and retail management information systems of the Veterans Canteen Service are to be automated using commercially-developed hardware and software. A contract award was made in fiscal year 1983 for this system to be located at the Finance Center, St. Louis, Missouri. Automated functions of the proposed system include: general ledger, accounts payable, accounts receivable, field asset control, operations retail analysis, and retail inventory control.
Prisoner of War (POW) System	The POW system would establish a data base of information pertaining to prisioners of war in order to better determine the special needs, and plan effective methods of meeting the needs, of POWS. Data would be provided by each VAMC to build a centralized data base.
Verticle File	Provides estimates of the number of individual veterans using VA's Health Care Delivery System. Additionally, estimated projections as to the number of new users, the number and rate of return of former users, etc., can be ascertained. The DM&S vertical file, currently being developed at the Austin DPC, is a merger of five different existing data files: PTF, CENSUS, Staff Outpatient, Fee Basis, and Compensation and Pension files.

APPENDIX XIII

VETERANS ADMINISTRATION
OFFICE OF DATA MANAGEMENT AND TELECOMMUNICATIONS
AUTOMATED SYSTEM DEVELOPMENT PROJECTS
PLANNED FOR THE 5-YEAR PERIOD, FISCAL YEARS 1985-1989

The VA's Office of Data Management and Telecommunications (CDM&T) has 35 automated application system development projects planned for the 5-year period, fiscal years 1985-1989. A brief description of these projects follows.

Application system project	Project description
Loan Guarantee System Redesign	This project involves redesigning the Loan Guarantee System to accept and report information by computer terminals and telecommunications lines. This project will permit: —immediate retrieval of information from the systems master files, —edits of transaction information to identify and reject erroneous information before updating the system's master files, and —automation of the current manual procedures involving disbursement for insurance and property taxes on VA-owned properties.
Automatic Budget System (ABS) Enhancement	This project involves enhancing ABS to include the capability to (1) record and report the results of congressional action on VA's budget requests and (2) reconcile VA's budget request with the budget authority approved by the Congress.

APPENDIX XIV

Department of Memorial Affairs (DMA) Information Processing System Design	This system will be a comprehensive management information system for administering interrment benefits for veterans and their beneficiaries. The system will automate processing of benefit applications for markers and headstones, include a word-processing module, prepare annual budget requests; automate engineering and library functions, maintain program master files, and maintain a master file of status and location information for gravesites. The system will include six subsystems: —Monument Application Subsystem, —Record of Interrment Subsystem, —Gravesite Reservation Subsystem, —National Cemetery Statistical Reporting Subsystem, —Gravesite Layout Subsystem, and —National Cemetery Productivity Subsystem.
Personnel Accounting and Integrated Data (PAID) System Redesign	This project involves a complete redesign of the PAID System. The redesign objectives are to: —establish a single personnel/payroll database, —use computer terminals and telecommunications lines to enter and retrieve information thus eliminating the need to keypunch information onto cards for data entry, —enhance edits and controls over transaction information,

APPENDIX XIV

—reduce the amount of time to make system changes,

—reduce the time to implement new reports,

—reduce the amount of paper used by and produced by the system, and

—eliminate, to the extent practicable, manual processes, computations, and files.

Agency Regulation Management Information Retrieval System (ARMIRS) Design

ARMIRS will support VA's information and regulations staff. This staff produces a variety of internal management reports, reports to the Congress, and reports required by other federal agencies. The system will be implemented in six phases:

—Publications and Regulations Subsystem,

—Regulations History Tracking Subsystems,

—U.S. Code 38 Compliance Subsystem,

—Freedom of Information Act and Privacy Act Reporting Subsystem,

—Records Inventory Requirements Subsystem, and

—Records Control Schedule Subsystem.

Office Automation System

This system will provde VA top management with integrated office automation data and word processing capability. The system will be implemented in three phases:

—correspondence tracking system expansion to link department and staff offices into the Correspondence Tracking System and to track correspondence between the administrators and staff and department offices,

APPENDIX XIV

—information management application to provide information management capabilities such as modeling, graphics, database, report generation, and search and retrieval of information, and

—office automation technology to provide integrated office automation techniques to include automated phone directories, time management, spelling dictionaries, and automated messages and notebooks.

Automated Management Information System (AMIS) Redesign

This project covers a redesign of AMIS as it is currently operated. AMIS supports the management reporting needs of the VA Administration. The system interfaces with a large number of other automated systems run by the VA. The system will be modified to:

—expand from 110 to 165 the number of reports for the Budget Office,

—restructure reports for the Laboratory and Dental Service, 45 trial balance reports, and reports covering compensation, pension, and education benefits,

—implement system changes requested by users,

—produce reports on microfiche and letter size paper,

—increase automated links with other automated systems,

—flag questionable information in reports and flag information that is missing on reports,

—expand the database to accomodate 5 years of data, and

APPENDIX XIV

—implement the U.S. Postal Service's 9 digit zip code.

Beneficiary Indentification and Records Locator System (BIRLS) Redesign

This project involves a major redesign of the current BIRLS system. The objectives of the redesign effort are to:

—add additional items of information to the BIRLS master files,

—use structured design and programming techniques,

—develop complete system documentation, and

—use database management techniques.

The redesigned BIRLS system will provide VA-wide rapid access to identifying information on veterans and beneficiaries over the TARGET communications network. Using TARGET, BIRLS will be able to provide VA regional offices and medical centers with verified veterans' service data to support eligibility determinations for benefits and medical care and support expedited processing of claims for benefits.

Central Accounts Receivable System (CARS) Redesign

This project involves a major redesign of CARS to provide effective automated support to the Department of Veterans Benefits for its accounts receivable work relating to compensation, pension, education, and loan guarantee overpayments in order to attempt to recover money owed VA. The redesigned CARS will automatically exchange information with VA's Compensation, Education, and Pension System and systems at the Department of Justice and Internal Revenue Service.

APPENDIX XIV

	money owed VA. The redesigned CARS will automatically exchange information with VA's Compensation, Education, and Pension System and systems at the Department of Justice and Internal Revenue Service.
Vocational Rehabilitation and Counseling (VR&C) System (Chapter 31) Design	This system was partially installed in October 1983 and processes claims for vocational rehabilitation and counseling benefits on TARGET. When fully installed, this system will process awards for Chapter 31 participants and will completely replace the current Vocational Rehabilitation and Education (Chapter 31) system.
Accounting System (VR&E) Design	The Accounting System will replace the current VR&C, Compensation and Pension, Veterans Educational Assistance (Chapter 34), and Dependents Educational Assistance (Chapter 35) accounting system. The new system will be based on the accounting system for the Post-Vietnam Era Veteran's Educational Assistance (Chapter 32) benefit payments.
Post-Vietnam Era Veterans' Education Assistance (Chapter 32) Accounting System Enhancement	This enhancement adds the capability to enter and retrieve data by computer terminal and telecommunications lines to the Post-Vietnam Era Veterans' Education Assistance (Chapter 32) Accounting System.
Post-Vietnam Era Veterans' Educational Assistance (Chapter 32) Benefit Payment System Enhancement for Benefit Lump-Sum Payment	This enhancement to the system will add the capability to process lump-sum benefit payments through the computer. Currently, lump-sum payments are manually computed and paid.
Post Vietnam Era Veterans' Educational Assistance (Chapter 32) Benefit Payment System Enhancement for CARS Interface.	This enhancement to the system will add the capability to compute and charge interest on benefit payment overpayments by computer. Currently, interest computations and assessments are done manually. This enhancement also provides for the exchange of automated information with the central Accounts Receivable System (CARS).

APPENDIX XIV

Post Vietnam Era Veterans' Educational Assistance (Chapter 32) Benefit Payment System Enhancment for On-Line Correction Processing

Compensation Pension and Education (CP&E) System Redesign. This redesign covers eleven efforts:

—batch payment system enhancements,

—on-line correction and update of system files,

—added capabilities to produce summary accounting information,

—on-line entry of information on transactions related to veterans' dependents,

—on-line entry of information on ratings of veterans eligibility for certain classes of benefits,

—redesign of notification letters subsystem,

—redesign of the subsystem that authorizes and computes original benefit payment awards,

—redesign of the subsystem that authorizes and computes supplemental benefit payment awards,

—redesign of subsystem that updates master file records,

—on-line entry of education benefit transaction information,

—enhancements of edits of compensation, pension, and education transaction information.

This enhancement to the system will add the capability to update master file records by computer terminals and telecommunication lines.

The objectives of the redesign effort of the Compensation, Pension, and Education System are to:

—incorporate enhancements requested by users in the Department of Veterans Benefits,

—implement congressional CP&E legislative benefits,

—automate letters of notification to veterans and/or their survivors of benefit award actions and/or disallowances,

—produce a variety of output messages and reports to regional offices to support processing of claims and award/disallowance-related actions, and

—produce a variety of payment reports and vouchers to the Controller in maintaining VA's budget for CP&E activities.

APPENDIX XIV

Insurance System (INS) Redesign	This project will redesign the system to (1) provide for entering and retrieving information by computer terminals and telecommunications lines and (2) to enhance controls in the subsystem that edits and posts transaction information to the system master files.
Education System Enhancement	This enhancement of the Education System will provide for entering information into and retrieving information from the system by computer terminals and telecommunications lines.
Automated Allotment Control System (ACS) Design	The ACS will provide the Department of Medicine and Surgery with a single system to allocate resources to the Department's various organizational components and programs. The new ACS will replace the Department's current Automated Allotment and Accounting, Manpower Tracking, Resource Allocation, and Annual Budget systems.
Hospital Base Home Care (HBHC) System Design	The HBHC System will capture, record, summarize, and report information regarding a veteran's physical and mental status, medication, and equipment and services provided by the VA. This system will provide information to assess the quality of care, program effectiveness, and program costs.
New Patient Treatment File Design	This system will replace the Department of Medicine and Surgery's existing Patient Treatment File. The new system will be able to track patients discharged from VA medical facilities by ward and bed section. The information produced by the system will be used by the Department of Medicine and Surgery to make resource allocations.
ADP Resource Accounting System (A-121) Design	This system will be designed to satisfy the requirements of OMB Circular A-121 on ADP

APPENDIX XIV

costs. This system will be a cost accounting system for all VA-wide computer centers. It will provide for:

—accounting for full ADP facility costs,

—allocating costs to users, and

—sharing of excess ADP capacity and recovery of costs through GSA's Interagency ADP Sharing Program.

Construction Management Systems Design

Three systems are being designed to support construction programs and activities. The systems are the (1) Construction Management System, (2) Construction Administration System, and (3) Construction Technical System. Each system consists of a number of subsystems. An outline of the systems and subsystems follows.

(1) Construction Management System

—Budget Construction Obligation Outlay Subsystem,

—Capital Plant Evaluation Subsystem,

—Change Order Control Subsystem,

—Construction Cost Analyses Subsystem,

—Construction Site Management Subsystem,

—Cost Management Subsystem,

—Critical Path Method Subsystem,

—Planned Productivity, and

—Support Subsystem.

(2) Construction Administration System

—Architect and Engineer Library Subsystem,

—Construction Automated Personnel Subsystem,

—Construction Bidder List Subsystem,

—Design Fee Negotiation Subsystem, and

—Master Construction Specifications Subsystem.

(3) Construction Technical System

—Office of Construction Communcia-tions Subsystem,

—Plan Library Information and Retrieval Subsystem,

—Small Office Microfiching/Computer Assisted Retrieval Subsystem,

—Facility Design, Development, and Review Subsystem,

—Facility Transport Subsystem,

—Medical Facilities Planning Subsystem,

—Interactive Medical Facility Planning Subsystem,

—Real Property Management Subsystem, and

—Construction Local Area Network Subsystem.

APPENDIX XIV

ESTIMATED COSTS FOR VETERANS ADMINISTRATION COMPUTER APPLICATION SYSTEM DEVELOPMENT PROJECTS FOR FISCAL YEARS 1985 THROUGH 1989

Project name	Estimated costs					
	1985	1986	1987	1988	1989	Total
	(thousands)					
Office of Data Management and Telecommunication Projects:						
Loan Guarantee System Redesign	$ 678	$ 688	$ 604	$ 324	$ -	$ 2,294
Automated Budget System Enhancement	91	215	216	217	-	739
Department of Memorial Affairs (DMA) Information Processing Design	96	160	224	256	256	992
Personnel Accounting and Integrated Data (PAID) System System Redesign	1,690	1,690	1,130	1,128	-	5,638
Agency Regulation Management Information Retrieval System (ARMIS) Design	96	96	96	96	-	384
Office Automation System	126	128	128	132	-	514
Automated Management Information System (AMIS) Redesign	279	412	673	865	897	3,126
Beneficiary Identification and Records Locator System (BIRLS) Redesign	923	660	637	585	300	3,105

APPENDIX XV

Project name	Estimated costs					
	1985	1986	1987	1988	1989	Total
	(thousands)					
Centralized Accounts Receivable System (CARS) Redesign	$ 1,080	$ 1,080	$ 1,080	$ 1,080	$ 1,080	$ 5,400
Vocational Rehabilitation and Counseling (VR&C) System (Chapter 31) Redesign	526	534	-	-	-	1,060
Accounting System (VR&E) Design	-	410	354	810	821	2,395
Post-Vietnam Era Veterans' Assistance (Chapter 32) Accounting System Enhancements	310	316	-	-	-	626
Post-Vietnam Era Veterans' Educational Assistance (Chapter 32) Benefit Payment System Enhancement for Lump Sum Payments	279	-	-	-	-	279
Post-Vietnam Era Veteran Educational Assistance (Chapter 32) Benefit Payment System for CARS Interface	497	-	-	-	-	497
Post-Vietnam Era Veteran Educational Assistance (Chapter 32) Benefit Payment System Enhancement for On-Line Correction Processing	313	498	-	-	-	811

APPENDIX XV

Project name	Estimated costs 1985	1986	1987	1988	1989	Total
	(thousands)					
Compensation, Pension, and Education (CP&E) System Redesign:						
Batch Payment System	$ 1,080	$ 1,080	$ 1,080	$ 1,080	$ 1,080	$ 5,400
On-Line Correction and Update of Files	1,260	1,260	1,260	1,260	1,260	6,300
Summary Accounting Information	74	45	-	-	-	119
On-Line Entry of Transaction Information	57	-	-	-	-	57
On-Line Entry of Rating Information	5	55	-	-	-	60
Notification Letter Subsystem	43	39	-	-	-	82
Authorization and Computation of Benefit Payment Subsystem	16	95	-	-	-	111
Supplemental Benefit Payment Awards Subsystem	159	-	-	-	-	159
Update of Master File Subsystem	310	226	229	232	236	1,233
On-Line Entry of Education Benefit Transaction Information	-	284	479	-	-	763
Enhancements of System Edits	218	221	466	472	480	1,857
Insurance System Redesign	1,595	1,658	1,721	1,787	1,854	8,615
Education System Enhancement	340	-	-	-	-	340

APPENDIX XV

Project name	Estimated costs					
	1985	1986	1987	1988	1989	Total
	(thousands)					
Intensive Care Planning Model[a]	$ -	$ -	$ -	$ -	$ -	$ -
Space Classification Methodology[a]	-	-	-	-	-	-
Space Planning Criteria Determinants[a]	-	-	-	-	-	-
Surgical Space Management Information System[a]	-	-	-	-	-	-
Geriatric Research Education and Clinical Center (GRECC) System[a]	-	-	-	-	-	-
Audio/Visual Nurse Call Systems[a]	-	-	-	-	-	-
Non-Recurring Maintenance Program[a]	-	-	-	-	-	-
Spinal Cord Injury Registry[a]	-	-	-	-	-	-
Automated Allotment Control System (ACS) Design	183	183	-	-	-	366
Hospital Base Home Care (HBHC) System Design	68	68	-	-	-	136
New Patient Treatment File Design	465	465	-	-	-	930

APPENDIX XV

Project name	Estimated costs 1985	1986	1987	1988	1989	Total
	(thousands)					
ADP Resource Accounting System (A-121) Design	$ 156	$ 123	$ -	$ -	$ -	$ 279
Construction Management System	519	463	470	478	486	2,416
Construction Administration System	80	84	68	68	68	368
Construction Technical System	170	172	176	180	180	878
Subtotal	13,782	13,408	11,091	11,050	8,998	58,329
Information and Training System For Continuing Education[a]	-	-	-	-	-	-
Department of Medicine and Surgery Management Information System[b]	1,750	-	-	-	-	1,750
Medical Equipment Reporting System (MERS)	200	205	210	-	-	615
Department of Medicine and Surgery						
Decentralized Hospital Computer Program	23,619	21,796	20,923	20,923	20,923	108,184
Integrated Hospital System	4,500	4,500	4,500	4,500	4,500	22,500

APPENDIX XV

Project name	Estimated costs					
	1985	1986	1987	1988	1989	Total
	(thousands)					
Automated Procurement System[a]	$ -	$ -	$ -	$ -	$ -	$ -
Veterans Canteen Service[a] Accounting System	-	-	-	-	-	-
Prisoner of War (POW) System[a]	-	-	-	-	-	-
Verticle File[a]	-	-	-	-	-	-
Subtotal	$30,069	$26,501	$ 25,633	$25,423	$25,423	$133,049
Total	$43,851	$39,909	$36,724	$36,473	$34,421	$191,378

[a]The Veterans Administration's ADP and Telecommunications Plan Fiscal Years 1985-1989 and The Department of Medicine and Surgery's ADP Plan Fiscal Years 1985-1989 did not present cost estimates for these systems.

[b]Cost estimates for fiscal years 1986-1989 will be made at the completion of the project planning effort to be conducted during fiscal year 1985.

APPENDIX XV

FINANCIAL MANAGEMENT SYSTEM
PROJECTS INCLUDED IN THE VETERANS ADMINISTRATIONS ADP AND TELECOMMUNICATIONS PLANS FOR FISCAL YEARS 1985 - 1989

Project name[a]	Financial management function supported by project[a]				Estimated cost[b]
	Planning and programming	Budget development	Budget execution and accounting	Audit and evaluation	
					(thousands)
Loan Guarantee System			x		$ 2,294
Automated Budget System		x			739
DMA Information Processing System	x				992
PAID System			x		5,638
ARMIS[c]					-
Office Automation[c]					-
AMIS		x	x		3,126
BIRLS			x		3,105
CARS			x		5,400
VR&C System - Chapter 31			x		1,060
VR&E Accounting System			x		2,395
Post-Vietnam - Chapter 32			x		626
Post-Vietnam - Lump Sum Payments			x		279
Post-Vietnam - CARS Interface			x		497
Post-Vietnam - On-line Processing			x		811
Compensation, Pension, and Education System (11 subsystems)			x		16,141
Insurance System			x		8,615
Education System			x		340
Automated Allotment Control System		x	x		366
HBHC System	x	x		x	136
New Patient Treatment File	x				930
Construction Management System	x	x			2,416
Construction Administration System			x		368
Construction Technical System	x				878
Decentralized Hospital Computer Program[c]					-
ADP Resource Accounting System			x		279

APPENDIX XVI

Project name[a]	Financial management function supported by project[a]: Planning and programming	Budget development	Budget execution and accounting	Audit and evaluation	Estimated cost[b]
					(thousands)
Integrated Hospital System[e]					
Department of Medicine and Surgery MIS	x	x			$ 1,750
Information and Training System for Continuing Education[c]					
MERS			x		615
Intensive Care Planning Model	x				c
Space Classification Methodology	x				c
Space Planning Criteria Determinants	x				c
Surgical Space Management Information System	x				c
GRECC System				x	c
Audio/Visual Nurse Call System[c]					
Non-Recurring Maintenance Program			x		c
Spinal Cord Injury Registry[c]					
Automated Procurement System			x		c
Veterans Canteen Service Accounting System			x		c
Prisoner of War System[c]					
Verticle File	x				c
44 Financial Management System Projects					$ 59,796

[a]See appendix X and XI for full description of the projects and their impact on financial management.

[b]See appendix XII for details on project costs.

[c]Nonfinancial management systems.

[d]Estimated costs not reported by VA in its ADP and Telecommunications Plans For Fiscal Years 1985-1989.

[e]System is a commercially available, off-the-shelf hospital administration and patient care system that is being field tested in three VA medical centers. Currently, there are no firm plans to implement IHS at VA; consequently, it is not included as a VA financial management system project.

APPENDIX XVI

STAGE OF DEVELOPMENT OF VETERANS ADMINISTRATION'S SYSTEM DEVELOPMENT PROJECTS FOR 5-YEAR PERIOD, FISCAL YEARS 1985-1989

Project name	Planning	System design studies	Technical design	Development
Loan Guarantee System			x	
Automated Budget System			x	
DMA Information Processing System	x	x	x	
PAID System			x	
ARMIS[a]		x	x	
Office Automation[a]	x			
AMIS		x		
BIRLS			x	x
CARS			x	x
VR&C System - Chapter 31		x	x	x
VR&E Accounting System			x	
Post-Vietnam - Chapter 32			x	x
Post-Vietnam - Lump Sum Payments				x
Post-Vietnam - CARS Interface			x	x
Post-Vietnam - On-Line Processing		x	x	
Compensation, Pension, and Education System (11 Subsystems)		x	x	x
Insurance System			x	x
Education System			x	x
Automated Allotment Control System			x	
HBHC System		x	x	
New Patient Treatment File		x	x	
Construction Management System		x	x	x
Construction Administration System		x	x	x
Construction Technical System		x	x	x
Decentralized Hospital Computer Program[a]			x	x
ADP Resource Accounting System			x	
Integrated Hospital System[a]				x
Department of Medicine and Surgery MIS	x	x		
Information and Training System for Continuing Education[a]	x			

APPENDIX XVII

Project name	Planning	System design studies	Technical design	Development
MERS				x
Intensive Care Planning Model	x			
Space Classification Methodology		x	x	
Space Planning Criteria Determinants		x	x	
Surgical Space Management Information System		x	x	
GRECC System	x			
Audio/Visual Nurse Call System[a]				x
Non-Recurring Maintenance Program				x
Spinal Cord Injury Registry[a]				x
Automated Procurement System		x	x	x
Veterans Canteen Service Accounting System				x
Prisoner of War System[a]	x	x		
Verticle File			x	x

[a]These are nonfinancial management system projects.

APPENDIX XVII

CONTRACTS ISSUED TO ACQUIRE ADP EQUIPMENT TO SUPPORT THE DHCP AUTOMATED HOSPITAL ADMINISTRATION SYSTEM[a]

Item	Number	Contractor	Equipment model	Date awarded	Purchase cost
CRTs	13,181	Terminals Unlimited	QVT-102	10/28/83	$ 5,917,600
MODEMS	583	Falcon Systems	Cermetec 212A	08/28/83	195,305
MODEMS/MULTIPLEXTORS	198	Codex Corporation	Intelligent 6001	08/28/83	613,800
PRINTERS/LQ	1,047	Falcon Systems	C.ITOH F10-40	08/30/83	1,316,250
PRINTERS/DR	1,257	SMS Data	INFORSCRIBE 1000	08/30/83	11,542,339
PRINTERS/KSR	836	SMS Data	MT1612	08/30/83	1,420,364
PRINTERS/RO	4,160	SMS Data	INFOSCRIBE 700	08/30/83	4,203,792
PRINTERS/LP	390	SMS Data	C.ITOH 300	08/30/83	1,214,665
LABORATORY INTERFACES	352	(RFP TO BE RE-ISSUED IN SECOND QUARTER/1984)			

APPENDIX XVIII

Item	Number	Contractor	Equipment model	Date awarded	Purchase cost
CPU/CLASS I	40	Digital Equipment Corporation	PDP 11/44	09/11/83	$ 1,477,783
CPU/CLASS II	120	Digital Equipment Corporation	PDP 11/44	09/11/83	6,570,525
CPU/CLASS III	78	Digital Equipment Corporation	PDP 11/44	09/11/83	4,285,507
CPU/CLASS IV	140	Digital Equipment Corporation	PDP 11/44	09/11/83	5,753,224
CPU/CLASS V	38	Intersystems	PDP 11/44	10/28/83	3,092,216
VAX UPGRADES	13	Digital Equipment Corporation	PDP 11/44	09/15/83	987,681
Total					$48,591,051

[a]See app. XIX.

APPENDIX XVIII

SUMMARY OF ADP EQUIPMENT TO BE DELIVERED DURING FISCAL YEARS 1984 and 1985 TO VA MEDICAL FACILITIES SUPPORT THE DHCD AUTOMATED HOSPITAL ADMINISTRATION SYSTEM

DHCP equipment classes	Estimated cost per site	Number of sites	Total estimated ADP equipment cost
Class I[a]	$556,000	10	$ 5,560,000
Class II[b]	409,000	31	12,679,000
Class III[c]	269,550	30	8,086,500
Class IV[d]	191,250	68	13,005,000
Class V[e]	103,500	32	3,312,000
Totals		171	$42,642,500

[a]Dec PDP 11/44 (5 CPUs) with disk and magnetic-tape systems, MUMPS software license, communications devices, approximately 175 video display terminals and a complement of line, receive only dot matrix, document, key-send-receive dot matrix, and letter quality printers.

[b]DEC PDP 11/44 (3 CPUs) with disk and magnetic-tape systems, MUMPS software license, communications devices, approximately 140 video display terminals and a complement of line, receive only dot matrix, document, key-send-receive dot matrix, and letter quality printers.

[c]DEC PDP 11/44 (2 CPUs) with disk and magnetic-tape systems, MUMPS software license, communications devices, approximately 88 video display terminals and a complement of line, receive only dot matrix, document, key-send-receive dot matrix, and letter quality printers.

[d]DEC PDP 11/44 (2 CPUs) with disk and magnetic-tape systems, MUMPS software license, communications devices, approximately 60 video display terminals and a complement of line, receive only dot matrix, document, key-send-receive dot matrix, and letter quality printers.

[e]DEC PDP 11/44 (1 CPU) with disk and magnetic-tape systems, MUMPS software license, communications devices, approximately 27 video display terminals and a complement of line, receive only dot matrix, document, key-send-receive dot matrix, and letter quality printers.

ADP EQUIPMENT PROCUREMENT PLANS INCLUDED IN THE VETERANS ADMINISTRATION'S ADP AND TELECOMMUNICATIONS PLANS FOR FISCAL YEARS 1985-1989

Project name	Estimated costs					
	1985	1986	1987	1988	1989	Total
	(thousands)					
ADP equipment to support the Decentralized Computer Program (DHCP)[a]	$42,643	$ -	$ -	$ -	$ -	$42,643
ADP equipment for VA medical facilities for automated application systems other DHCD.	496	-	-	-	-	496
Fee Basis System--Computer Terminals	166	166	166	171	171	840
Replace Computer Equipment in the Austin, Texas, Computer Center	8,775	(562)	(888)	-	-	7,325
Electronic Printing Systems	566	592	619	-	-	1,777
Total	$52,646	$196	$(103)	$ 171	$ 171	$53,081

[a]See app. XIX.

APPENDIX XX

APPENDIX XXI

ADVANCE COMMENTS FROM THE VETERANS ADMINISTRATION

Note: GAO comments supplementing those in the report text appear at the end of this appendix

Office of the Administrator of Veterans Affairs

Washington DC 20420

Veterans Administration

SEP 13 1985

Mr. Frederick D. Wolf
Director, Accounting and Financial Management Division
U.S. General Accounting Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Wolf:

This responds to the undated revised draft "Financial Management Profile of the Veterans Administration" provided in an August 7 meeting with representatives of the Veterans Administration (VA) Office of Inspector General. Since this report is based on conditions and information existing at the time GAO gathered their data, it does not reflect changes and improvements made during the past 2 years. The revised draft replaces the earlier March 13, 1985 draft on which the Inspector General provided informal comments to members of your staff during a July meeting. Although some of those comments are reflected in the revised report, there remain areas of disagreement. The primary one is the misrepresentation of the role of the Beneficiary Identification and Records Locator Subsystem (BIRLS).

See comment 1. Now on pages 31 - 34.

This version of the report includes language (pages 60-61) rejecting our earlier assertion that BIRLS is not the VA's main system for supporting decisions on a claimant's eligibility for benefits. The original intent of the system, as explained in our prior comments, was to provide basic identifying information on the veteran and the location of the actual hardcopy records. The revised report discusses the shortfalls of BIRLS but goes on to say that even though BIRLS does not now function as a computerized source of eligibility information, the VA has been collecting discharge data on all persons released from military service since 1973 and, therefore, must intend BIRLS to be a computerized source of information. This argument misses our main objection. We willingly concede that BIRLS is a computerized source of information. The point we object to is describing BIRLS as the VA's main or central system for eligibility data. (See pages v, 39, 40, 47, 122, and 138.)

The military service data contained in BIRLS is only one element that goes into an eligibility determination. Depending on the type of benefit, there are always one or more other elligibility factors that are of equal weight in determining whether a benefit may be granted. These other determining factors, such as disability, dependency, and income status, do not appear in BIRLS. In addition, the subsystem does not contain detailed information on benefits received, only general indicators such as "compensation and pension" or "education." It is not stipulated if the benefit is compensation or pension, or if it is Chapter 34 or 35. (Statements on pages 40 and 122 which assert these data are maintained in BIRLS are incorrect.) It is on these grounds that we strongly object to the contention that BIRLS is the main or central eligibility system.

APPENDIX XXI

Mr. Frederick D. Wolf

See comment 2.
Now on page 22.

Another area of disagreement concerns maintaining a consolidated general ledger. We are still convinced that consolidation along functional lines is more pertinent than on an Agencywide basis. The structure of the VA is such that we believe maintenance of consolidated general ledgers should be at a level to support financial reporting on medical center operations, benefit programs, and cemetery operations. Overall consolidated financial statements for the entire VA would be prepared, as they are now for the Veterans Administration Annual Report, from these program line general ledger systems.

See comment 3.
Now on page 16.

When considering our informal comments, GAO did not agree with our classification of the Cost Accounting System as "Budget execution and accounting..." instead of "Budget formulation and presentation." The output of this system is used by budget execution staff throughout this Agency. Cost reports are not even distributed to budget formulation personnel. Therefore, we still believe this system should be classified as a budget execution and accounting system. (See Appendix VI, page 117.)

See comment 4.

The Design Fee Negotiation System should not be classified as a Financial Management System as it only provides a historical record of previously negotiated contracts. There is no analysis conducted on the data in the system, nor are the data fed into any other system. Therefore, it should be deleted. (See Appendix VI, page 128.)

Enclosed are comments on other portions of the draft report.

Sincerely,

Deputy Administrator • For

HARRY N. WALTERS
Administrator

Enclosure

APPENDIX XXI

ENCLOSURE

COMMENTS ON THE GAO REVISED DRAFT "FINANCIAL MANAGEMENT PROFILE: THE VETERANS ADMINISTRATION"

Many of the comments VA provided informally have been incorporated in the revised report. However, a number of changes that we believe are important were not accepted. Those, and changes to correct other parts of the revised version, are listed and should be incorporated in the final report.

See comment 5.

Page i, BACKGROUND, para. 2, line 1: The VA does not pay "retirement" benefits. Delete the words "retirement, disability" and insert "pension, compensation."

See comment 6.
Now on page 5.

Page i, BACKGROUND, para. 2 states that VA operates "seven loan guarantee programs." On page 4, the terms "seven loan funds and special accounts" and "seven loan and loan guarantee funds" appear. On page 7 is the term "seven loan funds." Pages i and 7 should be changed to include the reference to special accounts since the table on page 5 includes the Special Therapeutic and Rehabilitation Activities Fund and the General Post Fund.

See comment 7.

Page ii, para. 1 states "...VA uses 732 computer central processing units" without qualifying that the vast majority of this number consists of microcomputers.

See comment 8.
Now on page 2.

Page 3, para. 1: Change the description of the burial program to read: "In addition, VA operates a system of 109 national cemeteries located in the noncontiguous United States to provide for the burial of veterans (and their eligible dependents) who were discharged from the military services under conditions other than dishonorable, as well as the proper marking of their graves in both VA and private cemeteries. Also administers a Federal grant assistance program to states and territories for establishing, expanding, and improving state veterans cemeteries."

The phrase "honorably discharged" is not accurate as there are other types of discharges which qualify a veteran for the burial program. Only those dishonorably discharged do not qualify. Contrary to GAO's statement, the Republic of the Philippines is not eligible for cemetery grants, nor do the grants provide for maintenance.

See comment 9.
Now on page 5.

Page 6, concerning estimates of outpatient visits shown in table: We cannot identify the source of GAO's estimate for medical visits to outpatient clinics (343,223 "VA" and 53,862 "contract care"). The Summary Volume of the Budget Appendix shows Fiscal Year 1983 estimates of 16,627,000 "staff" and 1,892,000 "fee" visits, a total of 18,519,000.

See comment 10.
Now on page 32.

Page 41, para. 2 comments on time delayed responses from BIRLS. The concept as presented is incorrect. Medical facilities may experience delays in determining eligibility, but this is only in cases where there is limited or no information in BIRLS. However, the system should not be faulted if the veteran has not previously approached the VA for benefits. In these cases,

APPENDIX XXI

determining eligibility requires that a hardcopy of the record be reviewed before the determination can be made. In cases of direct on-line query by the medical facilities through the VA Data Transmission System, the average response time is 30 seconds. The current response time for regional offices and those medical centers with Target network access is five seconds or less.

See comment 11.
Now on page 38.

Page 45: We offer an additional comment regarding the Fee Basis System. There are plans to expand and integrate the present system with the Decentralized Hospital Computer Program (DHCP). This will facilitate greater financial control and program management at both field and VA Central Office levels.

See comment 12.
Now on page 40.

Page 47, para. 2 states "...VA's experience shows that often claimants understate other income..." and "...In many claims for education benefits, information supplied by schools...." We believe the use of "often" and "many" should be quantified in order to give a more accurate picture of the effect on benefits awarded.

See comment 13.
Now on page 40.

Page 47, para. 2, line 7, concerning understating income when applying for VA compensation and pension benefits: Delete "compensation and" as compensation benefits are not affected by income.

See comment 14.
Now on page 40.

Page 47, footnote 3 infers that Education On-Line (Target) is a separate system. It is a subsystem to Chapters 34 and 35.

See comment 15.
Now on page 41.

Page 48, para. 1, concerning BIRLS' incomplete files and regional office staff not being able to corroborate information: This statement does not recognize the fact that the physical claims folder and other hard copy evidence is the basis on which eligibility determinations are made.

See comment 16.
Now on page 41.

Page 48, para. 2, concerning entering information "into the appropriate VA compensation, pension system or education on-line Target system": Change to read: "... appropriate VA compensation, pension, or education system" because the Vocational Rehabilitation and Education (Ch. 31) system is not on-line Target. It still relies on paper input.

See comment 17.
Now on page 47.

Page 56 contains a listing of weaknesses in the Centralized Accounting for Local Management System. All nine of these weaknesses were identified in the December 1984 Federal Managers' Financial Integrity Act report, but three (excessive agent cashier advances, excessive travel advances, and the $225,000 incorrect charge to an expired appropriation) were corrected before the report was issued. This corrective action should be footnoted in the GAO report.

See comment 18.
Now on page 53.

Page 65, second and last subparagraphs, concerning users not participating in preparing test data: It is the policy of the ADP Systems Audit Service in the Office of Data Management and Telecommunications to control preparation of the required test data since the project certification for the installation of Insurance Program changes to production are reviewed and certified by that Service, based on test results created by test data. The Service also maintains an ongoing test file for the testing of all Insurance Program changes.

APPENDIX XXI

ENCLOSURE

3.

See comment 19.
Now on page 55.

Page 67, subpara. 2, concerning access to the Austin computer center: We believe all Data Processing Center (DPC) personnel should use access badges within the facility. The cardkey system at Austin screens for access to specific areas using the magnetically coded numbers within the cardkey.

See comment 20.
Now on page 55.

Page 67, subpara. 3, concerning "System software changes were not approved, tested, or reviewed by an independent (third) party--that is, by non-ADP personnel.": System software is by nature closely related to the internal logical architecture of the device(s) it is intended to control and is, therefore, inherently extremely complex. A "non-ADP" person who has enough understanding of system software to be able to adequately approve, test, and review the changes has become an "ADP person."

See comment 21.
Now on page 55.

Page 68, subpara. 1, concerning "Only system software changes...were tested.": We cannot envision a circumstance wherein any programmer would change a program without making some post-change observation to see if the change had the desired result. More specific information on this GAO finding would permit us to respond more fully.

See comment 22.
Now on page 56.

Page 68, subpara. 3, concerning system software documentation not being up-to-date: Austin DPC policy, which requires that any system software changes be documented, will be reemphasized. The example GAO cites concerns program library system software purchased from a vendor. The only corrective action VA can take in this case is to repeatedly request the corresponding documentation from the vendor until it is provided.

See comment 23.
Now on page 56.

Page 68, subpara. 4, concerning "access to the computer center...": We recognize that this facility has inherent weaknesses due to its location in an open space environment. However, the computer room and other sensitive areas are controlled by a cardkey access system which precludes access by unauthorized personnel.

See comment 24.
Now on page 56.

Page 68, subpara. 5, concerning "Systems programmers had access to system software documentation...": We do not understand what benefit would be obtained by withholding access from systems programmers.

See comment 25.
Now on page 58.

Page 72, subpara. 1, item (2) states: "application programmers designed and conducted system acceptance tests.": This should be corrected to show that ADP Systems Audit Service is consulted on the design of new programs and makes the final certification that the system is operating correctly and is ready to be installed in production.

See comment 26.
Now on page 72.

Page 88: Add the "VR&C System - Chapter 31" as a planned system project in the "Budget execution and accounting..." category.

See comment 27.
Now on page 74.

Page 91, concerning "System Development Projects that Appear to Overlap": The revised report still does not clearly present the facts relating to the Integrated Hospital System (IHS). There is only one IHS test of commercial

APPENDIX XXI

ENCLOSURE

hospital systems by the VA and that is currently underway at three VA medical centers. IHS was mandated by the Congress after DHCP development had been approved and implementation begun. Since both efforts are geared toward accomplishing similar tasks within a hospital setting, albeit through different approaches, overlap is to be expected.

See comment 28. Now on page 79.

Pages 96 and 97, concerning estimated DHCP development and implementation costs (Also see Appendices XII and XVII): It should be stated that these estimates are for Initial and Full CORE only.

See comment 29. Now on page 79.

Page 97, para. 1, concerning the long-range DHCP implementation plan: Again, the draft report suggests that the Computerized Medical Information Support System, (COMISS), the Automated Management Information System (AMIS), and the Honeywell systems could be modified to fit into the overall DHCP at a lower cost than development of completely new modules. Current plans call for the complete replacement of these systems because they are written in languages that are incompatible with DHCP and run on equipment that is obsolete. The first of eight Honeywell systems has already been replaced by DHCP at the Long Beach Medical Center.

See comment 30. Now on page 80.

Page 97, para. 2, concerning the modules included in the COMISS system: Initially, four modules were planned for COMISS. Development work may have been conducted on all of them, but only the pharmacy module was fully developed. Therefore, delete "patient registration, patient scheduling" from this paragraph.

See comment 31. Now appendix IX.

Appendix VI, page 117, concerning the Construction Cost Analysis System: This system has been inactive approximately 2 years, but may be reactivated in Fiscal Year 1987.

See comment 32. Now appendix IX.

Appendix VI, page 117, concerning GAO's statement that AMIS is scheduled for redesign: As stated in our informal comments, there are AMIS enhancements underway, but not a redesign of the system. Approximately 4 years ago a redesign of AMIS was planned, but those plans have evolved and are no longer valid. (Also see pages 135 and 149.)

See comment 33. Now appendix IX.

Appendix VI, page 119, concerning the "Nationwide Consolidated System." The title should be "Nationwide Trial Balance System," the title shown on page A-1 (Appendix A) of Office of Management and Budget (OMB) Memorandum 85-16 which has been distributed throughout the government. GAO's use of a different title would be confusing to VA users of the OMB Memorandum.

See comment 34. Now appendix IX.

Appendix VI, page 125, concerning the description of the Vocational Rehabilitation and Education (Chapter 31) System: In line 1, substitute "awards" for "claims;" in line 4, substitute "participants" for "benefits;" and in line 5, substitute "current" for "detailed."

See comment 35. Now appendix IX.

Appendix VI, page 130, concerning the Utilization and Disposal of Excess/Surplus Personal Property System: This system was discontinued in the second quarter of Fiscal Year 1984 and incorporated into LOG I, the Integrated Procurement, Storage, and Distribution System.

APPENDIX XXI

ENCLOSURE

5.

See comment 36.
Now appendix IX.

Appendix VI, page 130, concerning the "Service Summary System": This system is still the Financial Management System. (Also see Appendices VII and VIII.)

See comment 37.
Now appendix IX.

Appendix VI, page 130, concerning the Area Take-off Reporting System: This system should be deleted. It has been inactive about 2 years and there are no plans to reactivate it.

See comment 38.
Now appendix XIII.

Appendix X, page 144, concerning the Nonrecurring Maintenance (NRM) Program: The first sentence in the project description should be deleted. The NRM system has no relationship to the construction program.

See comment 39.
Now on page 32.

Appendix XI, page 150, concerning the paragraph on BIRLS redesign: This paragraph is incorrect in its assessment of the redesign plan. Contrary to the statement made, BIRLS has been accessible to the regional offices through the Target network since the mid-1970's. Furthermore, medical centers will be given access to the Target network, and thus to BIRLS, during Fiscal Year 1986, long before the BIRLS redesign is implemented.

See comment 40.
Now appendix XIV.

Appendix XI, page 151, concerning the Vocational Rehabilitation and Counseling System (Chapter 31) Redesign (not "Design" as shown): The system description is incorrect. The following would be more accurate:

This system was partially installed in October 1983 and processes claims for vocational rehabilitation and counseling benefits on Target (on-line). When fully installed, this system will process awards for Chapter 31 participants on Target and will completely replace the current Vocational Rehabilitation and Education (Chapter 31) system now operating at VA's Hines, Illinois computer center.

See comment 41.
Now appendix XVI.

Appendix XIII, page 163, footnote e, concerning the Integrated Hospital System: The footnote incorrectly indicates that IHS does not have any financial management functions. IHS modules include inventory control, material management, resource allocation, and cost accounting.

The following are GAO's comments on the Veterans Administration's letter dated September 13, 1985.

GAO Comments

1. Agency comment and our evaluation are presented on pages 34 and 35.

2. Agency comment and our evaluation are presented on page 22.

3. Report amended. See page 16.

4. Design Fee Negotiation system deleted from report.

5. Executive summary ammended. See page i.

6. Report amended. See page 5.

7. No change to report needed.

8. Report amended. See page 2.

9. Report amended. See page 5.

10. Agency comment and our evaluation are presented on pages 34 and 35. See footnote 9 on page 32.

11. Agency comment included in report. See page 38.

12. Report amended. See page 40.

13. Report amended. See page 40.

14. No change to report needed.

15. Report amended. See page 41.

16. Report amended. See page 41.

17. Footnote added to report. See page 47.

18. Report amended. See page 53.

19. No change to report needed.

20. No change to report needed.

21. No change to report needed.

22. Comment added to report. See page 56.

23. No change to report needed.

24. No change to report needed.

25. Report amended. See page 58.

26. Report amended. See page 72.

27. Agency comment and our evaluation are presented on pages

28. Report amended. See page 80.

29. Agency comment and our evaluation are presented on page 80.

30. No change to report needed.

31. Report amended. See appendix IX.

32. Report amended. See appendix IX.

33. Report amended. See appendix IX.

34. Report amended. See appendix IX.

35. Report amended. See appendix IX.

36. No report change needed.

37. System deleted from report.

38. Report amended. See appendix XIII.

39. Agency comment and our evaluation are presented on pages 34 and 35. Also see footnote 9 on page 32.

40. Report amended. See appendix XIV.

41. No change to report needed.

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