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A PROJECT TO DETERMINE
A MORE EFFICIENT METHOD FOR MANAGEMENT
OF COMMERCIAL ACCOUNTS PAYABLE
AT WALTER REED ARMY
MEDICAL CENTER

A Graduate Management Project
Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the
Requirements for the Degree

of

Master of Health Administration

by

Lieutenant Colonel Tommy W. Mayes, MS

26 May 1989

"REPRODUCED AT GOVERNMENT EXPENSE"

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19. ABSTRACT (Continue on reverse if necessary and identify by block number) This project assessed the effectiveness of current accounts payable processes throughout all functional areas and identified problem areas which have contributed to difficulties with prompt payment. The results indicate that the combined benefits of an interface of existing automated systems, which would streamline the accounts payable process, with an organizational structure, which would provide improved staffing and supervision, would resolve the problem of timely payment to vendors. A Vendor Liaison Office would serve as the point of entry into the system for questions and concerns regarding payments. Significant reductions in the amount of interest penalties paid, cost reductions from discounts earned, and improved vendor relations can be achieved through this improved method for efficient management of commercial accounts payable. ←					
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TABLE OF CONTENTS

ACKNOWLEDGMENTS.....ii

LIST OF FIGURES.....v

LIST OF TABLES.....vi

CHAPTER

I. INTRODUCTION.....1

 General.....1

 Conditions Which Prompted the Study.....2

 Statement of the Problem.....3

 Objectives.....3

 Criteria.....4

 Assumptions.....5

 Limitations.....5

 Review of the Literature.....6

 Research Methodology.....9

II. DISCUSSION.....11

 General Information.....11

 Historical Perspective.....12

 Description of the Current Problem.....15

 Effectiveness of the Current System.....25

 Identification of Problem Areas.....32

 Adequacy of Current Information Systems.....39

 Solutions for Identified Problem Areas.....41

III. CONCLUSIONS AND RECOMMENDATIONS.....49

 Conclusions.....49

 Recommendations.....50

APPENDIX

A. DEFINITIONS.....52

B. WALTER REED ARMY MEDICAL CENTER
 ORGANIZATIONAL CHART.....55

C. FINANCE AND ACCOUNTING DIVISION
 ORGANIZATIONAL CHART.....57

D. ORDER FOR SUPPLIES OR SERVICES, DD FORM 1155.....58
E. VENDOR INVOICE.....60
F. RECEIVING REPORT, DD FORM 1155.....62
G. PAYMENT VOUCHER, SF 1034.....64
H. FORMAT FOR VENDOR INTERVIEWS.....66
BIBLIOGRAPHY.....67

LIST OF FIGURES

Figure	Page
1. Document Flow to the Commercial Accounts Section	17
2. Commercial Accounts Section Internal Document Flow	21
3. Document Flow After System Interface	42

LIST OF TABLES

Table	Page
1. Dollars Lost to Interest Penalties	26
2. Discounts Earned and Discounts Lost	28
3. Document Workload, Invoices	29
4. Document Workload, Receiving Reports	29
5. Summary of Problems Resulting in Interest Penalties	31
6. Summary of Problems Resulting in Lost Discounts	31

CHAPTER I

IntroductionGeneral

The healthcare industry is unique because of the professional commitment to provide quality services to patients in need while remaining competitive in an increasingly complex environment. The uniqueness of healthcare makes it difficult to apply many traditional business strategies. However, as Luke and Begun point out, it is this uniqueness that "is sufficient to justify the search for elements" which can be applied to the healthcare field (404). The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has recognized the importance of applying effective and efficient fiscal management techniques. In April of 1984, a chapter for "Management and Administrative Services" was added to the Accreditation Manual for Hospitals which requires the implementation of sound financial policies as a key factor in the accreditation process. The 1989 Accreditation Manual for Hospitals requires "written plans for the implementation of financial policies and practices that pertain to...the control of accounts receivable and payable, the handling of cash, and arrangements for credit" (84). Fiscal accountability systems are therefore needed to identify opportunities and to provide critical measures of effectiveness (Lemon and Meier 58).

Conditions Which Prompted the Study

This project was prompted by a request from the Chief of Staff, Walter Reed Army Medical Center (WRAMC). The Chief of Staff expressed concern that policies and procedures for control of accounts payable were ineffective. WRAMC has had difficulty in the area of commercial accounts payable for several years. In addition to not being able to take advantage of business discounts, the center is often forced to pay penalties for late payments. An audit of vendor payments completed in April 1987 revealed systemic problems with the procedures followed in the Commercial Accounts Section of the Finance and Accounting Office. Procedures for processing commercial account vouchers were not adequate to ensure prompt payment and accurate reporting of purchases from commercial vendors. A 30 August 1988 message from the Army Vice Chief of Staff directed the personal attention of commanders to solve the problem of interest penalties under the Prompt Payment Act..."Interest penalties are paid from mission funds. Paying penalties reflects on the Army's ability to conduct business properly and also drains our limited resources". These factors clearly indicate a need for a systemic review of the process for the management of commercial accounts. The cost of material management can be reduced by aggressively pursuing improved methods for the purchase of commercial items.

Statement of the Problem

To determine a more efficient method for management of commercial accounts payable at Walter Reed Army Medical Center (WRAMC).

Objectives

1. Conduct a literature review pertaining to the following topics:
 - a. Army regulations and policies concerning commercial accounts.
 - b. WRAMC policies and procedures concerning commercial accounts payable.
 - c. Accounts payable within the healthcare industry with emphasis on current methods for taking advantage of discounts and avoiding penalties for late payments.
2. Describe the current system for the normal flow of commercial purchase transactions.
3. Determine the effectiveness of the current system for control of accounts payable.

4. Identify problem areas which currently exist within the commercial accounts payable system.

5. Assess the adequacy of current information systems which support the accounts payable system.

6. Recommend solutions to identified problem areas which will result in improved efficiency of the management of accounts payable.

Criteria

1. Required characteristics for the standard of effective and efficient management, as prescribed by the Joint Commission on Accreditation of Healthcare Organizations, must be met.

2. The success of this project will be determined by the acceptance of the recommended changes to the accounts payable system for hospital wide implementation by the Deputy Commander for Administration (DCA), WRAMC.

Assumptions

1. Information obtained from the Finance and Accounting Office pertaining to late payments is accurate.
2. Sufficient hardware exists to accommodate enhancements to existing information systems.
3. The six month sampling period for historical data gathered from the Finance and Accounting Office is representative.

Limitations

1. Since only appointed contracting officers are authorized to obligate the US government, all discussions by the researcher with external suppliers and agencies must not imply a commitment by the government.
2. Although the proposed changes to the accounts payable system may have center-wide applicability, information will be gathered only from hospital activities.
3. The proposed changes to the accounts payable system must be implemented within current legal and regulatory guidelines.

Review of the Literature

An increasingly competitive marketplace has effected a dramatic change in the institutional behavior of hospitals. Cost containment measures have all but eliminated the pass through of costs to third parties. Economic changes have increased the importance of financial management to the extent that administrators must have a mastery of the field if they are to succeed. Whether public or private, profit or not for profit, the art of obtaining funds that the organization needs and of making optimal use of these funds once obtained involves a continual decision process. As with any decision process, administrators must insure that accurate and reliable information is provided for the process to function accurately. There must also be a framework consisting of proven techniques if the process is to function efficiently (Berman et al 8). Reducing materiel costs through efficient management of accounts payable is one indicator of how well an organization performs the financial management process.

Hospitals are becoming more aware of how accounts payable policies and purchasing decisions are affecting their cash flow. The ever-growing number of articles prescribing solutions to cash flow problems is indicative of the wide occurrence of these problems in the healthcare industry (Norris 57-62, Monczka and Taylor 12-16, Wilson 28-31, McClurkan 48-58). As an example, administrators at The George Washington University Medical Center have estimated that \$100,000 is lost each year due to

delays in processing of payments and that an annual savings of \$1 million per year could be achieved through restructuring of the materials management system (Chaufournier 3-5).

Accounts payable are also called "trade credit" because, strictly speaking, an account payable is a short term debt. The terms of payment for purchase of supplies directly influences the working capital needs of an organization. The purchase of supplies incurs a monetary obligation which is reflected as a current liability on financial statements (Neumann et al 110). Payment terms present opportunities to reduce the price of materials by taking advantage of purchase discounts. Purchase discounts are normally offered by a supplier in return for early payment. Conversely, taking the maximum possible amount of time to pay for materials reduces working capital requirements. Determining the least costly financing alternative requires development of an accounts payable policy for the payment of materials purchased with discount terms (Berman et al 292-99, Monczka and Taylor 15, Neumann et al 110). For most organizations the policy can be easily determined by comparing the cost of credit from other sources. If an alternative source of financing is used to take advantage of a discount, then the return from early payment must be greater than the cost of the alternative source (Sanderson 98-105).

While there may be advantages for using trade credit, failure to meet payment terms within a reasonable time period will raise questions concerning the trustworthiness of the management. These questions make suppliers less willing to offer credit and, eventually, result in higher prices to

compensate for the added cost of offering credit to slow payers (Berman et al 297). Concerns like these led to the passage of the Prompt Payment Act, Public Law 97-177, dated 21 May 1982. The act requires federal agencies to make payments on time and imposes an interest penalty for late payments. Purchase discounts are required to be taken as long as the discounts yield an effective annual interest rate greater than the current value of funds to the U.S. Treasury (Army Regulation 37-1 89). Walter Reed Army Medical Center Regulation 37-9, 9 March 1987, provides implementing instructions for the Prompt Payment Act. The regulation includes procedures for determining payment due dates, descriptions of required supporting documentation, delineation of responsibilities, and actions to be taken in the event of incomplete or incorrect documentation (1-5).

Despite the existence of detailed instructions and established procedures, WRAMC, along with other federal agencies, has failed to reduce congressional concern for prompt payment. Predictably, the result was the enactment of the Prompt Payment Act Amendment, which became effective on 1 April 1989. This amendment imposes more severe penalties for late payments (Lohman 1-3). The potential adverse impact of the amendment makes it imperative to examine the current system of commercial purchase transactions. This examination should document existing procedural flows and should assist in identifying problem areas, inefficiencies, and duplications in the current methods of the accounts payable system (Doyle 1).

Research Methodology

All applicable Department of Defense, Department of the Army, Health Services Command (HSC), and WRAMC regulations and policies were reviewed to identify regulatory requirements concerning commercial accounts. In addition, a literature review of methods for efficient management of accounts payable in non-government facilities was conducted. This review identified ways to take advantage of discounts and avoid penalties for late payments.

Interviews were conducted with selected personnel within the Directorate of Contracting, Directorate of Logistics, and Directorate of Resources Management to determine how regulations and policies are put into practice. Interviews were also held with supervisors of hospital activities served by the commercial accounts section. The interviews focused on their knowledge of the commercial accounts system. Finally, interviews were conducted with selected major suppliers to gather their opinions of problem areas related to late payments from WRAMC.

Historical data for a six month period was gathered from the Finance and Accounting Office to determine the number and dollar amount of interest penalties paid, the number and dollar amount of discounts taken, as well as the number and dollar amounts of lost discounts. These results were used to determine the effectiveness of the current accounts payable system. Payment vouchers for the last month in the period were reviewed

to determine if established policies and procedures were followed. Finally, an attempt was made to identify systemic problems which exist within the payment process.

An extensive analysis of the documentation of the information systems used in the accounts payable process was conducted to determine adequacy and potential for improved interface between systems. System users were observed to determine the proficiency level necessary for optimal utilization.

As a result of interviews, direct observation and evaluation of data, solutions that would improve the efficiency of the current system for management of commercial accounts payable were recommended.

CHAPTER II

DiscussionGeneral Information

The size and complexity of WRAMC are contributing factors to the difficulties being experienced with commercial accounts payable. WRAMC is a tertiary care medical center providing general, specialty, and subspecialty health services on a worldwide referral basis. There are 64 specialty clinics which serve approximately one million patients a year. In addition to patient care, WRAMC is recognized as a premier teaching and research institution. Intern programs are conducted for 45 specialty services with residencies and fellowships in medicine, dentistry, and health care administration, and there are 20 research laboratories committed to supporting a variety of research activities. WRAMC also provides administrative and logistical support to tenant units and satellite activities. The Army Institute of Dental Research, the Armed Forces Institute of Pathology, and the Walter Reed Army Institute of Research are major tenants which require specialized administrative and logistical support (WRAMC Directory 2-9).

The life and death implications of providing drugs, surgical supplies, and specialized equipment for treatment of patients at WRAMC are obvious. The effects of supplying and

sustaining the numerous activities involved in the education and training of health professionals and expanding the field of medical knowledge through research are not as visible but equally important. These support tasks are considerably more challenging at WRAMC than at most other federal medical treatment facilities. Literally thousands of items are being ordered on a recurring basis for delivery to over 150 different locations from several hundred vendors. Koprowski points out that the number of errors made within a materiel management system increases in proportion to the number of individual tasks to be performed. Further, vendors are also likely to make mistakes (26). The importance of the materiel management function requires a system designed to minimize errors and to respond appropriately to rectify situations which occur when mistakes are made.

Historical Perspective

As early as the summer of 1983, the Commercial Accounts section of the Directorate of Resources Management (DRM) was identified as falling behind in the processing of disbursements to commercial vendors. As a result, there was a loss of early payment discounts, increased interest charges, a large number of credit holds, and an increasing number of vendors who were not willing to do business with WRAMC. This situation was attributed to the fact that the Commercial Accounts Section was processing a large number of vouchers with a completely manual

system (Panek 4). In addition, Finance and Accounting Office (FAO) personnel were trying to comply with the recently enacted Prompt Payment Act, Public Law 97-177. The Prompt Payment Act was effective 1 October 1982 but was not implemented at WRAMC until December of 1982 due to a delay in implementing instructions from the United States Army Finance and Accounting Center (USAFAC). The act requires federal agencies which acquire property or services from business concerns to pay interest penalty payments if payment for each complete, delivered item of property or service is not made by the required payment date, or if an improper discount has been taken (WRAMC Regulation 37-9 1).

At the time of these new requirements resulting from the Prompt Payment Act, the Commercial Accounts Section was also suffering from a lack of adequate staffing. As a consequence, the system for payment of commercial accounts began to fail, thereby endangering medical operations with critical and chronic supply shortages due to vendor credit holds. At its worse, some 85 separate vendors chose not to deal with WRAMC unless payment was guaranteed (WRAMC Manpower Staffing 9). Numerous other vendors placed WRAMC on a status of limited trade credit which severely reduced the dollar amount of supplies which could be ordered at any one time. This action further complicated the situation by forcing multiple orders for supplies and requiring efforts to find alternative sources. These multiple orders, in turn, increased the backlog of payments. WRAMC was placed in a predicament where, instead of purchasing supplies at the lowest

cost, critical supplies were purchased at any cost (Quinn 1).

This situation resulted in a number of efforts to improve the control and processing of the documents necessary for timely payment of commercial accounts. These efforts centered around increasing management emphasis on the number of personnel assigned to the Commercial Accounts Section through the use of overhires, use of overtime, and requests for assistance visits to provide financial management expertise. Portions of the process were automated, but these efforts were a piecemeal approach (Broaddus). In any case, the immediate problems were partially resolved; that is, interest payments were reduced and commercial vendors removed WRAMC from credit hold.

An audit of vendor payments completed by the Internal Review and Audit Compliance Office, dated 14 July 1987, found that "vendor payments had improved and payments were made on a more timely basis". However, the audit noted continued problems with completeness and accuracy of payment documents, and noncompliance with established procedures (1). These findings were confirmed by a follow-up audit completed in March of 1989 (1-5). Although progress has been made, there has been an identified need for a systemic evaluation of the accounts payable system in order to make permanent improvements.

Description of the Current System

The current organizational structure which supports commercial purchase transactions mirrors the diversity and complexity of WRAMC. The WRAMC organizational chart is enclosed as Appendix B. The key element within the organizational structure which processes payments to commercial vendors falls under the Finance and Accounting Division, a division of the Directorate of Resources Management. This division is responsible for the operation of the Commercial Accounts Section. The purpose or mission of the Finance and Accounting Division is to perform voucher examination, verification, disbursement functions and to maintain the accounts pertaining to installation allotments, assets, and liabilities. This mission is performed in support of the medical center and tenant unit activities (WRAMC Regulation 10-1, 6-14). As illustrated in Appendix C, the Finance and Accounting Division is organized with the following branches: Quality Assurance, Accounting, Pay and Examination, Disbursing, and the Central Accounting Office for Nonappropriated Funds. The Commercial Accounts Section is a function of the Pay and Examination Branch. This section processes payment vouchers to commercial business firms for supplies, equipment and non-personal services.

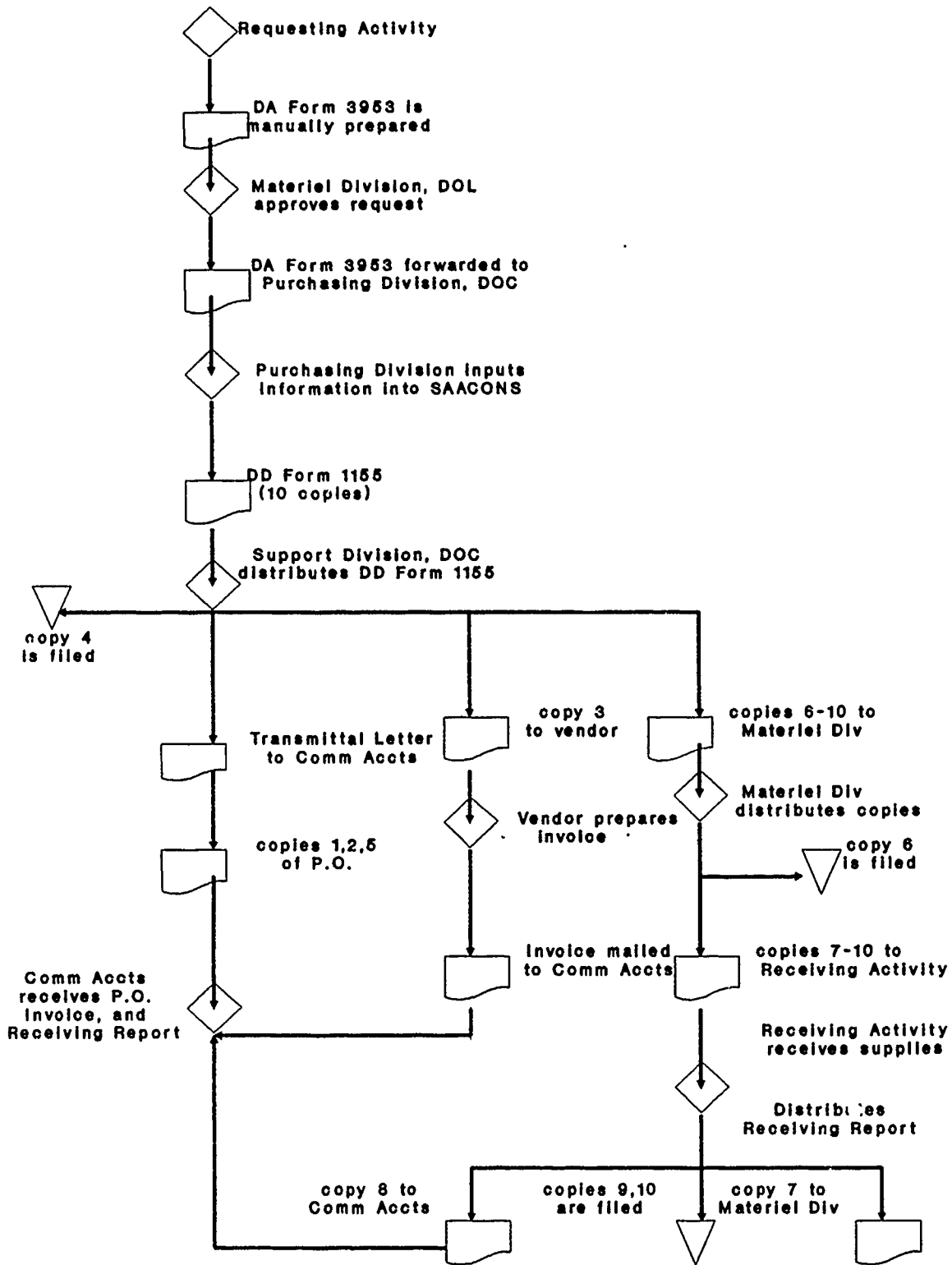
There are four documents the Commercial Accounts Section must have in order to process a payment to a commercial vendor. These include: (1) a contract, purchase, or delivery order; (2) vendor's invoice; (3) receiving report or certificate of performance; and (4) a payment voucher. The payment voucher is

the only document which the section generates internally. When the purchase order, vendor's invoice, and receiving report relating to a particular account are received at the Commercial Accounts Section, they are matched and examined for accuracy and completeness. If any of the above mentioned documents are missing or incorrect, a payment voucher cannot be prepared (WRAMC Regulation 37-9 2).

An example of the current system for processing procurement transactions should help to demonstrate the complexity of involvement between a number of activities. This example describes the actions and documents required for consumating a "small purchase". Small purchases from vendors make up 70-80 percent of all procurement actions for the medical center at an annual cost in excess of \$60 million (Kauffman). Figure 1 provides a detailed summary of the document flow to the Commercial Accounts Section for a small purchase procurement action.

When a need has been identified for a routine, one time procurement, a logistics technician prepares a Purchase Request, DA Form 3953, and assigns a document register number identifying the requesting activity. The purchase request identifies the item and provides a suggested source. This form is forwarded to the Materiel Division, Directorate of Logistics, for approval and assignment of a stock number for control and reference and subsequent entry into the Medical Stock Control System (MEDSTOC). The request is then sent to the Purchasing Division, Directorate of Contracting. A purchasing agent reviews the request and places the order with the vendor.

Figure 1
Document Flow to the Commercial Accounts Section



The requisition information from the request is entered into the Standard Army Automated Contracting System (SAACONS) using the small purchases module. The system generates an Order for Supplies or Services, DD Form 1155 (Appendix D) which, when properly authenticated, obligates the U.S. Government. The DD Form 1155 is used for small purchases when the total amount in any one transaction does not exceed \$25,000. This form provides, in one document, a purchase or delivery order; a receiving report; an inspection report indicating that the item is acceptable for use; a property voucher; and, when supported by a vendor's invoice, a payment voucher. The form is prepared in ten copies and is forwarded to the Support Division, Directorate of Contracting, for distribution. Distribution of the purchase order is as follows: copies 1,2, and 5 are forwarded to the Commercial Accounts Section, copy 3 is mailed to the vendor, copy 4 is retained by the Purchasing Division, and copies 6-10 are provided to the Materiel Division. The Materiel Division then forwards copies 7-10 to the appropriate receiving activity. The three copies for the Commercial Accounts Section are forwarded using a transmittal letter which is a preprinted form that requires a manual entry of the purchase order number, vendor name, and the dollar amount of the order for each set of three copies that are forwarded.

After the vendor receives the purchase order, an invoice is prepared and mailed to the Commercial Accounts Section (Appendix E). A proper invoice must include: (1) the name of the vendor and date of the invoice; (2) the purchase order

number; (3) a description, price, and quantity of supplies delivered; (4) payment and shipping terms; and, (5) complete mailing address and phone number of where payment is to be sent (FAD Document Processing 8). The vendor then prepares a shipping document containing sufficient information to match the delivery with the purchase order and delivers the supplies to the appropriate receiving activity.

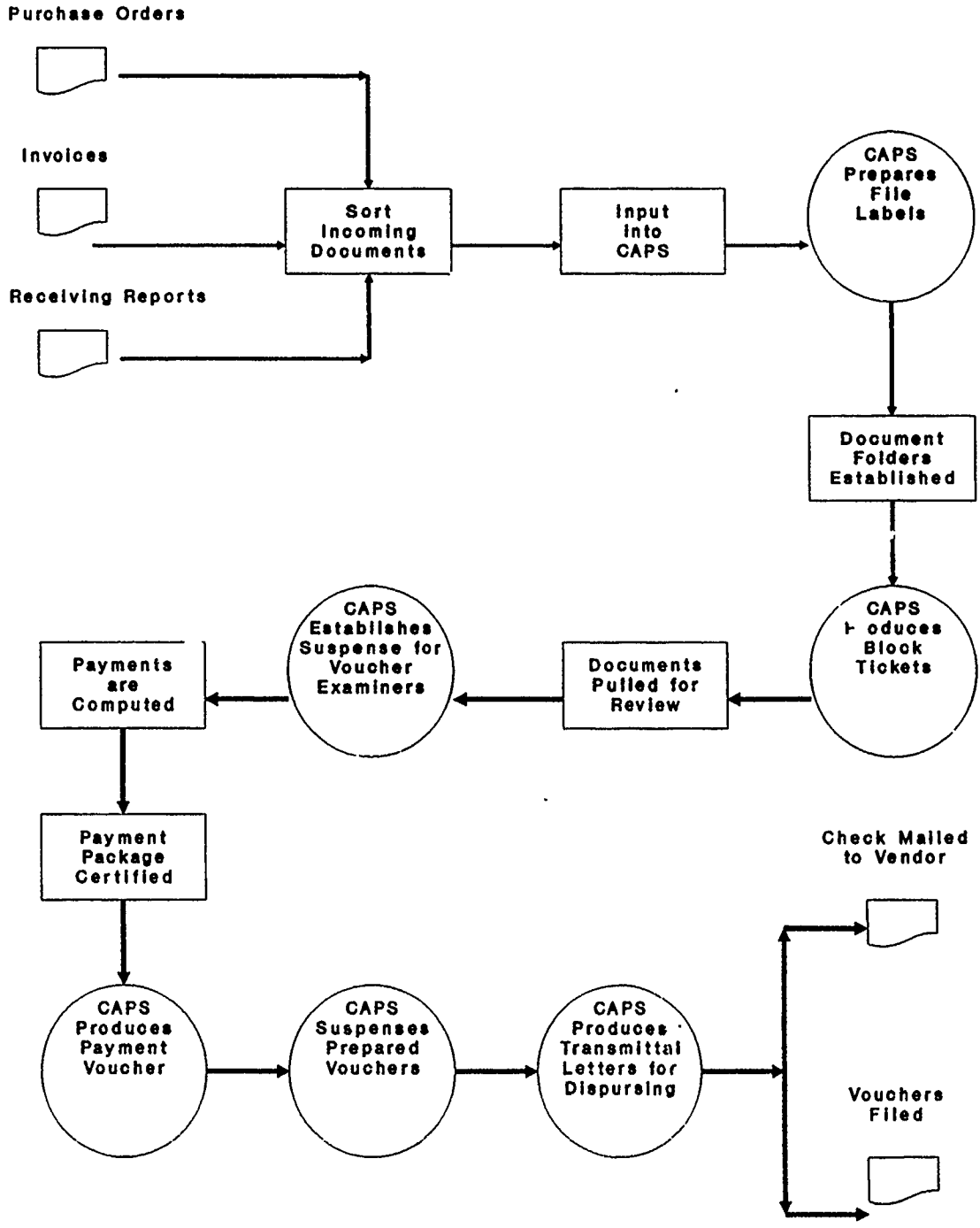
Upon receipt of the supplies, the receiving activity documents receipt by providing a receiver's signature and date of delivery in Block 26 of the DD Form 1155. If necessary, the supplies are inspected to determine that they are acceptable for use. After receipt and acceptance have been documented, the DD Form 1155 becomes a receiving report (Appendix F). Copy 7 is forwarded to the Materiel Division where it is used to close out the MEDSTOC entry and then filed. Copy 8 is forwarded to the Commercial Accounts Section and the remaining copies are retained by the receiving activity. Again, all required documents: purchase order, invoice, and receiving report, must be received in the Commercial Accounts Section before a payment voucher can be generated.

A large number of documents arrive daily in the Commercial Accounts Section. The current organization must rely heavily on manpower to process these documents. The WRAMC Working TDA, current as of 24 March 1989, reflects authorizations for 11 civilian positions against 28 requirements for the section. However, there are also 17 overhire positions authorized. Authorized and overhire positions equal the total requirements

for the section but there are only 20 personnel currently assigned (177-79). The Chief, Commercial Accounts Section is a GS-8, Voucher Examiner Supervisor. There are two GS-7, Voucher Examiner Supervisors, one in charge of the control unit and the other in charge of the documentation unit. A Lead Voucher Examiner, GS-6, monitors and controls the flow of documents and vouchers. The remaining personnel in the section are GS-5, Voucher Examiners, who process, compute, and assemble vouchers for payment. There are 16 Voucher Examiners assigned against 24 authorizations, which includes overhires.

As documents are received at the mail desk within the Commercial Accounts Section, they are sorted by type; for example, purchase orders with discount terms, all other purchase orders, invoices offering discounts, invoices without discounts, receiving reports with discount terms, and all other receiving reports. These are placed in separate stacks. Documents are checked against any accompanying transmittal letters. If there are no discrepancies, the original copy of the transmittal letter is signed, dated, and returned to the sending unit. All incoming documents are then date stamped using a perforating date machine. The total number of each type of document received is entered into the daily receipt log. The documents are then distributed for processing. Figure 2 provides a summary of the document flow within the Commercial Accounts Section.

Figure 2
Commercial Accounts Section Internal Document Flow



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The control unit receives documents for input into the Commercial Accounts Processing System (CAPS). For each purchase order, a voucher examiner keys in the purchase order number, payment terms, shipping information, vendor address, anticipated date of delivery and accounting classification. The system prevents entry of duplicate purchase order numbers. Labels, which include the purchase order number and name of vendor, are printed for all incoming purchase orders. The labels are placed on folders where copies of purchase orders, invoices, and receiving reports are filed after being entered into CAPS. Primary control of documents is maintained by reference to the purchase order number. Ideally, the purchase order is the first document to be placed in the folder followed by a properly completed vendor invoice. Upon receipt of supplies, the receiving activity is required to forward the receiving report to the Commercial Accounts Section so as to arrive "not later than five working days after date of receipt of goods or the date of acceptance of the goods, whichever is later" (WRAMC Regulation 37-9 4).

Normally, the Commercial Accounts Section must receive the purchase order, vendor invoice and receiving report before a payment due date can be established. In accordance with fiscal regulations and sound cash management procedures, payments to vendors "should be made as close as possible to, but not later than, the 30th day after a proper invoice is received or supplies...are accepted, whichever is later" (Army Regulation 37-107 5). In accordance with the Prompt Payment Act, when

payments are not made on time, interest penalties are due, and penalty payments have to be made regardless of whether the vendors request them. Rates for computing interest penalties are published semiannually by the United States Army Finance and Accounting Center (USAFAC). The period for payment of interest penalties begins the day after the required payment due date and continues until the estimated payment date. Payments are considered made on the date that a check is issued by the Disbursing Branch (FAD Document Processing 8-12).

If a discount is offered and is cost effective, the payment due date is the last day of the discount period. Cash discounts which yield an effective annual interest rate equivalent to or greater than the current value of funds to the U.S. Treasury, are determined to be cost effective and are taken unless payment cannot be made during the specified discount period. The percentage rate for the current value of funds to the U.S. Treasury is published every quarter by USAFAC. Interest penalties are required to be paid on discounts taken after the discount period has ended unless the underpayment is corrected within a 15 day grace period (Army Regulation 37-1 89).

CAPS provides for computation of payment due dates, including discounts, and produces block tickets of contracts which are ready for voucher processing on a daily basis. A block ticket is simply a listing of transactions that are within ten days of the payment due date. Each listing provides the purchase order number, vendor name, and payment suspense date. The block tickets are used to pull the folders containing

documents necessary for preparation of payment vouchers. Block tickets and accompanying folders are reviewed by voucher examiners in the documentation unit. If payment is appropriate, the voucher examiner enters the purchase order number into CAPS and uses the system's voucher preparation function. CAPS calculates payment amount and prints a payment voucher, SF 1034 (Appendix G). A voucher examiner supervisor certifies the vouchers which are forwarded to the Disbursing Branch for payment. A check is prepared on the specified payment due date and mailed to the vendor (Johnson 1-4). This action essentially completes a very tedious accounts payable process.

The activities involved with, and documents required for, requesting a routine, one time procurement for a small purchase item are demonstrative of the complexity of the task for efficient management of accounts payable. Other procurement actions require involvement of other activities; and, in some cases, a significantly different document flow. The Commercial Accounts Section processes vendor payments involving nonappropriated funds, imprest funds, and is also instrumental in purchases under the auspices of programs such as the Capital Expense Equipment Program (CEEP) and the Medical Care Support Equipment (MEDCASE) Program. These purchases require deviations from the accounts payable system that has been presented and create additional concerns regarding the effectiveness of this system.

Effectiveness of the Current System

To determine the effectiveness of the current system for accounts payable, an analysis of data for a six month period was conducted. The purpose of this descriptive analysis was to evaluate performance indicators pertaining to the number and dollar amounts of interest penalties paid, the number and dollar amounts of discounts taken, as well as the number and dollar amounts of lost discounts. The number of invoices and receiving reports arriving for processing were calculated to gain a perspective of the level of activity within the Commercial Accounts Section. The six month period began 1 October 1988 and continued through 31 March 1989. Completed payment vouchers for the month of March 1989 were reviewed to identify common errors and the extent of compliance with established policies and procedures. Only transactions subject to the Prompt Payment Act and processed using SAACONS and CAPS were included in the analysis.

Avoiding interest penalties has become a major area of emphasis for WRAMC and the amount of interest penalties paid is monitored by the U.S. Army Health Services Command (HSC). In Fiscal Year 1983, WRAMC paid \$70,332 in interest penalties (Pancek 1). This was reduced to a total of \$35,723 in Fiscal Year 1988, but this was still far in excess of an acceptable amount. USAFAC has assigned a Fiscal Year 1989 goal for interest penalties of "not more than .00005 of the total dollar value of accounts payable vouchers subject to the Prompt Payment

Act" (HSC Memorandum, Jan. 1989). As shown in Table 1, the dollar amount of interest penalties for the first six months of Fiscal Year 1989 was \$11,092 with a total voucher value of \$815,037. Obviously, this was not even close to the USAFAC goal of less than \$50 for that time period.

Table 1

Dollars Lost to Interest Penalties

<u>Month</u>	<u>Number of Penalties</u>	<u>Dollar Amount of Penalties</u>	<u>Total Voucher Dollars</u>
Oct 88	44	\$3,357	\$247,536
Nov 88	48	1,153	63,749
Dec 88	42	829	83,828
Jan 89	36	920	87,351
Feb 89	84	2,156	164,510
Mar 89	<u>103</u>	<u>2,677</u>	<u>168,063</u>
	357	\$11,092	\$815,037

Average monthly number of penalty payments- 60.

Average monthly payment of interest dollars- \$1,849.

1.36 percent of the total voucher dollars disbursed during the six month period was lost due to interest penalty payments.

Despite missing the goal, WRAMC appears to be performing better than previous years; however, historically, the worst months for high interest penalties are August and September (Acton). Also, while the dollar value of interest penalties paid does provide some indication of the effectiveness, or lack thereof, of the accounts payable system, the amount of interest penalties which should have been paid is probably much higher. Most vendors, not wanting to take on the administrative procedures for requesting additional payment, do not make an issue of late payments (Billeter, Crabill, Damsgaard).

Payments made in a timely manner save money and so do discounts when the terms are advantageous. Table 2 reflects the performance of WRAMC in terms of taking advantage of discounts when offered. The number of discounts that were offered during this period appears to be very low. There are several possible reasons why so few discounts were available. The first possibility is that adequate internal controls were not in place to consistently identify discounts that were offered. If payment documents are not received in time to take advantage of a discount, there is a tendency not to report the discount as lost. Secondly, vendors may not see any point in offering discounts to WRAMC based on the history of delayed payments. Finally, large wholesalers within the healthcare materiel industry are moving away from policies of providing discounts for accelerated payment; instead, they are beginning to offer more attractive discounts for increased order quantities (Clark, Feary, Nickels, Seesman).

Table 2

Discounts Earned and Discounts Lost

<u>Month</u>	# of Discounts		# of Discounts	
	<u>Earned</u>	<u>\$ Amount</u>	<u>Lost</u>	<u>\$ Amount</u>
Oct 88	80	\$6,925	8	\$961
Nov 88	24	1,258	8	495
Dec 88	49	3,820	8	96
Jan 89	53	3,318	10	106
Feb 89	132	5,991	15	914
Mar 89	<u>118</u>	<u>8,660</u>	<u>23</u>	<u>1,342</u>
	456	\$29,972	72	\$3,914

The ability of the Commercial Accounts Section to make timely payments and to take advantage of discounts is partly a function of workload. Key indicators of workload volume are shown in Table 3 and Table 4. These tables show the number of invoices and receiving reports that arrived each month and the number of these documents that remained on hand at the end of each month during the period. Invoices and receiving reports are considered on hand if they have not been processed and suspended as part of a package ready for transmittal to the Disbursing Branch for payment (Owens).

Table 3

Document Workload, Invoices

<u>Month</u>	<u>Beginning Balance</u>	<u>Received</u>	<u>Processed</u>	<u>On Hand</u>
Oct 88	2797	1466	1331	2662
Nov 88	2662	1267	1415	2514
Dec 88	2514	1225	1247	2492
Jan 89	2492	2026	1325	3193
Feb 89	3193	2424	1834	3783
Mar 89	3783	2371	2461	3693

Table 4

Document Workload, Receiving Reports

<u>Month</u>	<u>Beginning Balance</u>	<u>Received</u>	<u>Processed</u>	<u>On Hand</u>
Oct 88	1159	1135	1194	1100
Nov 88	1100	2041	1178	1963
Dec 88	1963	1191	1209	1945
Jan 89	1945	1516	1193	2268
Feb 89	2268	2116	1562	2822
Mar 89	2822	2464	2145	3141

The workload data for invoices and receiving reports does not identify those documents which were sent due to double or partial shipments. Ideally, the number of invoices and receiving reports processed and on hand should be the same. This was not the case for this six month period. The difference can be explained, in part, by the time lag between receipt of invoices and receiving reports. Also, there are generally more invoices received as a result of duplicate or partial shipments. As would be expected of a system which is dependent on manual procedures, the number and dollar value of interest penalties paid, and the number and dollar value of discounts lost, increased in proportion to the volume of documents that were processed during the six month period.

A review of completed payment vouchers that resulted in interest penalties or lost discounts during March, 1989, revealed a number of errors and noncompliance with established policies and procedures. Table 5 summarizes the problems which resulted in the payment of \$2,677 for interest penalties on 103 transactions. Table 6 summarizes the problems which resulted in the failure to take advantage of 23 discounts which could have saved \$1,342.

In addition to the problems summarized in the following tables, the review of additional March payment vouchers resulted in identification of 18 payments which should have included interest penalties. There were also 32 payments with cost effective discounts that were neither taken, nor reported as lost.

Table 5

Summary of Problems Resulting in Interest Penalties

<u>Problem Area</u>	<u>Number of Interest Penalties</u>
Missing Purchase Orders.....	8
Problems with Invoices.....	3
Late Receiving Reports.....	51
Processing Errors.....	29
Processing Delays.....	<u>14</u>
	103

Table 6

Summary of Problems Resulting in Lost Discounts

<u>Problem Area</u>	<u>Number of Lost Discounts</u>
Problems with Invoices.....	2
Late Receiving Reports.....	13
Processing Delays.....	<u>8</u>
	23

The results of the analysis of this six month period, which included a review of completed payment vouchers for the final month of the period, indicate that the current system for commercial accounts payable is not effective. WRAMC's performance has not met the intent of the Prompt Payment Act, nor the goals established by USAFAC for reducing interest penalty payments. The review and analysis raised questions concerning the accuracy of reports generated by the Commercial Accounts Section and provided the focus for a more detailed examination of systemic problems.

Identification of Problem Areas

Problem areas in the current system for commercial accounts payable were identified through personal observation gained by tracing documents through the system, interviews with personnel from requesting activities, and interviews with personnel from activities responsible for the flow of payment documents. Vendors were also interviewed to gain their opinions of problem areas related to late payments from WRAMC. The format used for vendor interviews is shown in Appendix H.

Many of the problems with the current system for commercial accounts payable begin with well intentioned efforts to get supplies as quickly as possible. This often results in an illegal procurement; that is, in response to a need, requesting activities may deal directly with a vendor. If the vendor responds by sending supplies, an invoice may appear in the

Commercial Accounts Section. There is no associated purchase order and no receiving report. Of course, there is also not a purchase order number on the invoice which, as mentioned earlier, is the primary reference and control for payment documents. Because the transaction takes place outside of the established system, resolution of subsequent problems requires diligence in demanding payment by the vendor and extra effort by the Commercial Accounts Section to learn the details of this undocumented procurement transaction. The requesting activities' lack of understanding of the payment process is a primary cause of support problems. Frustration over the difficulties encountered in resolving payment problems does not help the process. Some vendors are very aware of this problem; however, as one vendor stated: "I have a good relationship with the...physicians. I try to get them what they need. Getting the payment is another story" (Nickels).

Of course, there are procedures for legal procurement of supplies that are needed quickly. The Purchasing Division is authorized to place telephone orders with vendors when necessary. Contracts that are proffered by telephone are considered confirming orders. The vendor may, and often does, ship the requested supplies the same day that the telephone call is placed. There is a definite need for activities to be able to place a call and receive critical supplies in response to an emergency situation. However, of the 2,371 invoices that were received by the Commercial Accounts Section during the month of March 1989, 569 (24%) were confirming orders. The quality and

efficiency of the Commercial Accounts Section's work is determined, in part, by the time available to the voucher examiner to compute payment and prepare vouchers within a 30 day suspense. Confirming orders tend to alter the time frame available to make a routine payment. Invoices and receiving reports may arrive in the section weeks before the purchase order. This problem is compounded by the fact that vendors often ship a second time when they receive their paper copy of the confirming purchase order. The invoice resulting from the second shipment then generates a process leading to a returned shipment or a ratified contract for the duplicate shipment. In either case, valuable time is expended by the voucher examiner and additional documents are placed into an already burdened system (Broadus).

A number of supervisors of requesting activities who were interviewed were not aware of the proper administrative process for procurement actions and did not know where to direct vendors for payment information. These supervisors rely, almost exclusively, on logistics technicians and unit administrators to handle these functions. There is an acute shortage of these personnel and, even when they are available, they are not always informed when questionable procurement actions are initiated.

The Purchasing Division can also contribute to delays in the payment process. Errors involving item quantities and, or, vendor price lists occur when keying information into SAACONS. This results in time consuming contract modifications. There

are occasions when purchasing agents fail to follow up confirmatory orders with the preparation of a purchase order. If there is no purchase order, any subsequent invoice received by the Commercial Accounts Section must be returned to the vendor. This requires preparation of a letter explaining why the invoice is being returned and instructions on how to file a claim if the vendor is entitled to payment. The Chief, Purchasing Division points out that purchasing agents are overwhelmed with small purchase transactions. There are twelve purchasing agents authorized, but only six are currently assigned. In addition, there is also a problem with personnel expertise. Procurement regulations have become tremendously complicated and restrictive. An estimated twelve man'ours each week are spent by each purchasing agent to resolve payment problems with vendors (Juste).

After the Purchasing Division has completed the purchase orders, they are sent to the Support Division for distribution. This requires preparation of a transmittal letter. The transmittal letters are preprinted forms with spaces for manual entry of the purchase order number, vendor name, and dollar amount of the purchase order. As many as fifteen purchase orders are transmitted with each letter. If there are errors in the information contained on the transmittal letter, the entire package of documents is normally returned for correction. This researcher observed purchase orders which had been prepared on 21 March 1989, being delivered to the Commercial Accounts Section on 3 April 1989. Ostensibly, it took 14 days for the

documents to travel the one quarter mile distance between the two activities.

Vendors also make mistakes which contribute to problems with the current system. Invoices are often mailed to receiving activities, or to the Purchasing Division, rather than to the Commercial Accounts Section. There are instances of incorrect purchase order numbers on the invoices and cases where there is no purchase order number at all. Supplies may be shipped in units of issue different from what were specified or there may be a significant variance in unit prices. An especially common problem involves partial shipments which require contract modification before payment can be made. Larger firms will sometimes fill WRAMC's order by a subsidiary of the parent company. If WRAMC has no contract with the subsidiary, a payment cannot be processed. Another problem which involves primarily large firms is that they will request payment to be remitted to an address which is different from that which appears on the purchase order. A request for remittance to an address which is different from that to which the purchase order is mailed can be easily accommodated if the Purchasing Division has been previously informed.

Probably the most time consuming problem created by vendors involves misunderstanding, or outright disagreement, as to what constitutes "prompt payment". Vendors normally expect payment within thirty days of the delivery date of supplies. Under the rules of the Prompt Payment Act, there are a variety of circumstances which can result in delays in payment far in

excess of thirty days. Examples of these circumstances include improper invoices or a problem with the acceptance of the supplies. In accordance with regulations, these delayed payments are considered timely by the government; vendors consider them as late (Billeter, Crabill, Damsgaard). The Prompt Payment Act Amendment has resolved this disagreement in favor of the vendors, but for now, a considerable amount of voucher examiner time is spent answering vendor inquiries about late payments and reacting to lengthy statements of account. These statements often contain invoices that are being processed within acceptable time frames.

Despite the presence of a Central Receiving Office, there are still a multitude of items that, as a result of sensitivity, medical necessity or practicality, are being received by the various activities throughout the medical center. The Commercial Accounts Section is responsible for monitoring these activities and their efficiency in sending receiving reports (WRAMC Regulation 37-9 6). With the variety of equipment and supplies being received by such a large group of activities, a major effort is required to get the receiving reports. Problems are also created by extensive delays which can take place between receipt and acceptance of supplies. A failure to provide a date for receipt or acceptance may result in the payment of an inappropriate interest penalty. Similarly, a failure to properly note discrepancies involving unit price or quantity may result in an inappropriate payment.

Of course, the hub of the commercial accounts payable system is the Commercial Accounts Section. This is where all

the other activities involved in the system send the supporting documents to be processed for payment. If payments are not made in a timely manner, this is the first place which comes under scrutiny. Many of the problems which may be attributed to the section have already been identified and well documented.

Efforts to improve the control and processing of documents necessary for timely payment of commercial accounts have been initiated by a variety of sources: assistance teams; staff studies; and, most recently, audits conducted by the Internal Review and Audit Compliance Office. Problems most often cited include: lack of supervision, inadequate staffing, unqualified employees, and poor communication among activities.

Recommendations have centered around increasing supervision, establishment of training programs, stricter compliance with established policies and procedures, and improvements in accuracy of required reports (Pancek 5-9, WRAMC Audit 1-11, WRAMC Follow Up 1-4).

Despite intense scrutiny, the Commercial Accounts Section continues to operate using a process that is outdated and overwhelmed by the volume of work. Efforts are largely directed at reactive processing rather than to providing a responsive and efficient service. Additional controls and reporting requirements have only served to increase the cumbersome paper trail associated with document processing. WRAMC has evolved into an increasingly decentralized and diversified organization while the structure of the Commercial Accounts Section has remained basically unchanged. Any solution to the problems

within the accounts payable system should consider development of an organizational structure that can be responsive to multiple receiving areas, satellite clinics, and tenant activities. There also must be an awareness and willingness to take advantage of continued advances in information technology (Davenport 130). Attempts have been made to automate portions of the accounts payable system, but these efforts have been disjointed. There is; however, an opportunity to improve existing automated systems in the short term while developing a long term strategy for integrating information technology at WRAMC.

Adequacy of Current Information Systems

As mentioned previously, the primary information systems that currently support the accounts payable process are the Commercial Accounts Processing System (CAPS) and the Standard Army Automated Contracting System (SAACONS). These systems were individually designed and placed to automate separate functions involving commercial transactions. Operating as individual systems, CAPS and SAACONS have not reduced the effort, or the amount of paper, involved with processing accounts payable. Purchase orders, invoices, and receiving reports are still manually matched and reviewed prior to preparation of a payment voucher. In fact, there is a possibility that any benefits of CAPS are negated by the time involved in keying information into the system. SAACONS users were observed manually duplicating

much of the information that was generated by that system. These systems, in their current configuration, are not contributing to a reduction in workload or to improving the timeliness of payments. However, a review of the systems' documentation revealed that there is a potential to interface CAPS and SAACONS. Opportunities also exist for expansion to interface with other procurement related systems (Heim).

SAACONS is designed to expedite the processing of purchase requests and to produce procurement documents and forms. Utilizing an interactive database system, SAACONS has the potential to eliminate many of the labor intensive tasks involved with commercial accounts. The software supports both simplified purchasing and contracting actions, from initial entry of purchase requisitions to generation of contractual documents and cover sheets. Reports produced include those which support the tracking and documenting of requisitions and contracting actions. SAACONS is comprised of two major modules: small purchases and contracting. The small purchases module has the capability to be a complete tracking and management system for small purchases which can generate purchase and delivery orders. The contracting module also contains a tracking system, and has a capability to generate solicitations and completed contracts (CACI SAACONS Implementation 1-1+). The current hardware configuration for SAACONS consists of two Intel 320 systems which can support 32 devices, such as terminals and printers. Existing government owned IBM terminals are compatible

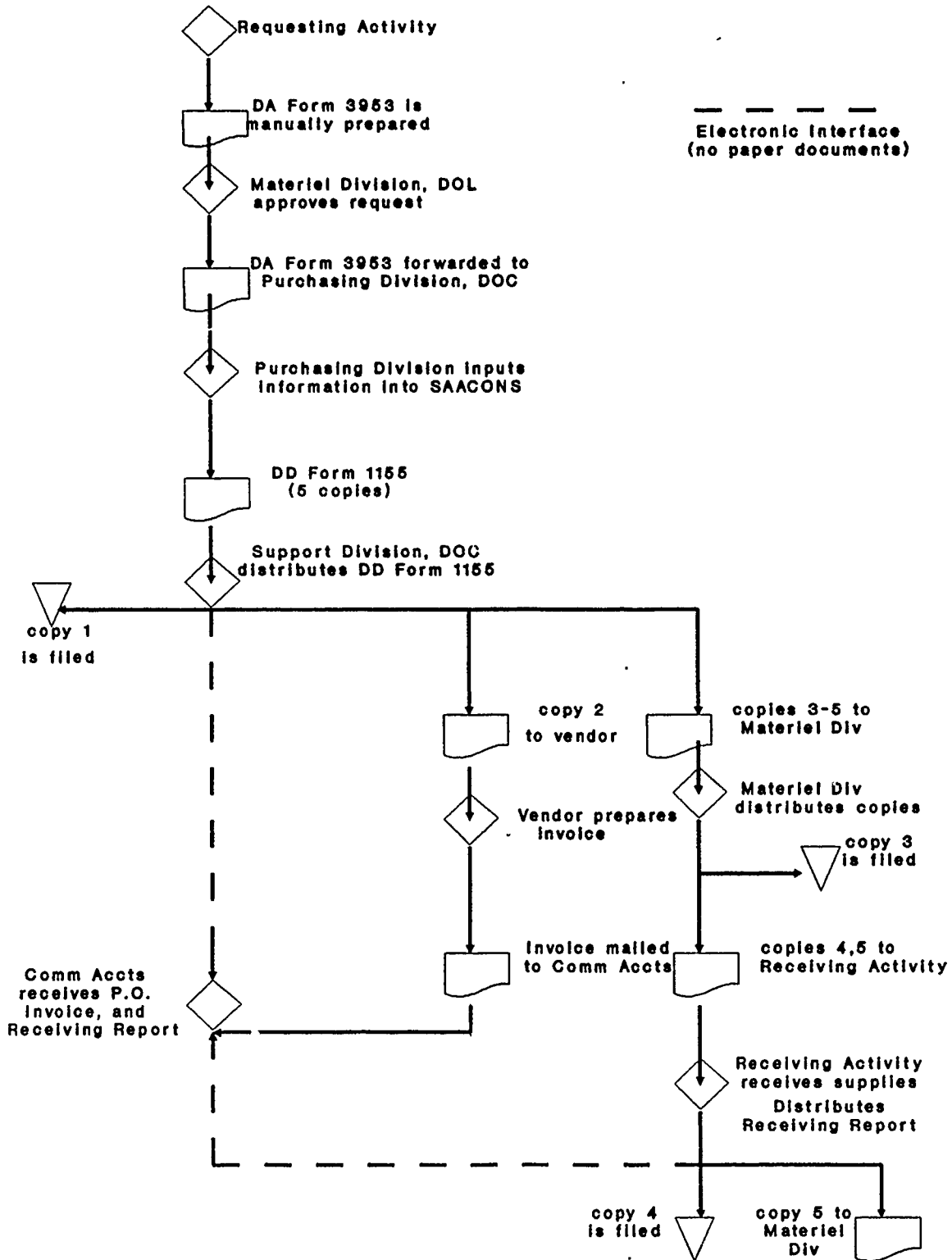
and can provide user access for on line inquiries. CAPS operates on IBM compatible microcomputers which would provide for the interface between systems (CACI SAACONS Implementation 1-11, CAPS System 1).

An interface would provide the capability for purchase order information to be passed from the Purchasing Division to the Commercial Accounts Section through the use of diskettes. After payment data from invoices and receiving reports has been entered into CAPS, this information could be passed back to the Purchasing Division using the same media (Johnson 3). This would update the tracking system in the small purchases module of SAACONS which could be accessed by requesting and receiving activities. Figure 3 summarizes the resulting document flow to the Commercial Accounts Section. A comparison with Figure 1 immediately reveals the reduction in documents and manual processing which should occur. Implementation of this proposed interface would have immediate benefits in terms of reducing workload and would enhance the development and implementation of solutions to other problem areas that have been identified.

Solutions for Identified Problem Areas

The lack of understanding and the frustrations over the difficulties involved with the current commercial accounts process by requesting activities are problem areas which paint the darkest picture of an inadequate system. Efforts to circumvent procedures in order to get supplies as quickly as

Figure 3
Document Flow After System Interface



"REPRODUCED AT GOVERNMENT EXPENSE"

possible, while contributing to payment delays, should be expected. Requesting activities provide the justification for the existence of a commercial procurement system. They deserve responsive and efficient service. A partial, short term solution could be realized through the interface of CAPS and SAACONS as described above. Requesting activities would have the ability to track requests through the system. Problems resulting from the numerous confirming orders that are placed would be reduced, although not eliminated, because the follow on purchase order would be received by the Commercial Accounts Section in a more timely manner.

The long term solution for problem areas identified within receiving activities involves expanding information systems to provide an automated purchase request capability. The ultimate goal should be an on-line requisition capability which would eliminate the need for paper requisitions and would use the initial requisition data throughout the commercial accounts system. The Materiel Division, after an automated entry into MEDSTOC has occurred, could review all requests prior to transmission to the Purchasing Division. An added benefit of an on-line requisition capability for requesting activities is that it would allow consolidation of requisitions from all WRAMC activities. Materiel costs could be reduced by taking advantage of discounts for increased order quantities (Bockow 49). Supervisors of requesting activities would no longer have to rely so heavily on logistics technicians and unit administrators to handle routine procurement actions. These personnel would have more time to work on more complex problems.

The Purchasing Division is responsible for preparing all orders for the local purchase of supplies to support the installation, tenant and satellite activities. Purchasing agents contact vendors to place orders, discuss prices, negotiate terms, and to resolve payment difficulties. There are numerous regulatory requirements that govern all aspects of the procurement function. Many of the problems identified in the Purchasing Division are due to the shortage of authorized purchasing agents. WRAMC cannot pay the salaries necessary to compete in this area for qualified personnel. Recruiting efforts should be increased to attract personnel with the level of expertise that is needed. Comprehensive, on-going training programs should be developed to improve and sustain the skills of personnel working in this complex area.

SAACONS is a fairly new system which explains why it is not yet being used to its full capability. The list of vendors for source of supply has not yet been automated and the tracking system for small purchases is not being used. Implementing the interface between SAACONS and CAPS would force the resolution of these problems. The requirement for manual preparation of transmittal letters for sending purchase orders to the Commercial Accounts Section would be eliminated as would the requirement to actually transport those documents.

Contract modifications resulting from errors involving item quantities or prices which occur during preparation of the purchase order would not be eliminated with the system interface. The solution to this problem would require

acquisition of an electronic order capability for system to system communication with vendors. An electronic order capability would also reduce the number of confirming orders because the system places the order, receives confirmations and checks prices. Perhaps the greatest benefit would be derived from the automated invoice that would be generated. There is a tremendous potential for reducing errors and paperwork through the use of vendor communications. However, there are limitations. As a rule, only large firms can afford such advanced systems and there is currently a number of systems with different machine languages (McClurkan 58). For now, electronic vendor communications should be considered as a long term goal. Advancements in information technology will eventually result in the capability to place automated orders with all vendors and to pay for the supplies with electronic fund transfers.

Many of the problems resulting from mistakes made by vendors could be eliminated if the vendors had a better understanding of the accounts payable system. The functions of Vendor Control, currently under the direction of the Directorate of Logistics, should be expanded to include improved communication with, and education of vendors. Redesignated as the Vendor Liaison Office, liaison personnel could provide an orientation to vendor representatives visiting WRAMC for the first time and brief them concerning the procurement process. A Vendor Representative's Pamphlet covering such things as invoice preparation, delivery instructions, payment procedures, and so forth, should be freely distributed and routinely updated (Underwood 58). A terminal

for access to the information made available by the proposed system interface would provide vendor liaison personnel with the capability to answer vendor inquiries and assist in the resolution of payment difficulties. Vendor performance, in terms of reliability and responsiveness, could also be monitored. The time, effort, and funds necessary to provide this service could result in significant benefits. Vendors can contribute directly to the goal of reducing materiel costs (Norris 61).

Even with the implementation of the proposed system interface, the large number of potential receiving activities would prohibit the placement of terminals at every location. As mentioned earlier, the current hardware configuration can only support 32 devices. However, a sufficient number of terminals do exist to allow placement in the highest volume areas, such as Central Receiving. This placement would improve the capability to track payment documents and would reduce the burden of responsibility of the Commercial Accounts Section for monitoring receiving activities and reporting on their efficiency in sending receiving reports.

The many problems associated with receiving activities reinforce the need for a long term strategy for acquiring improved information technology to support multiple receiving areas. For example, an on-line materiel system would allow receiving report information to be entered and immediately reconciled with purchase order and invoice data. This would virtually eliminate late receiving reports which are a major cause of the noneffectiveness of the current system.

Prior to further discussion of solutions for problems identified within the Commercial Accounts Section, there should be an awareness of the impact of some of the proposals that have already been presented. Successful implementation of the interface between CAPS and SAACONS would eliminate the need for several voucher examiners. As further improvements are made in the automation capabilities of WRAMC, additional reductions in the number of personnel assigned would be possible. The anticipated advancements in information technology could eventually eliminate any need for a Commercial Accounts Section. The type of on-line, integrated system that could make this happen is very near to becoming a reality. Although it is not realistic for WRAMC to have such a system in the near future, long range strategies should include this as a goal.

The best solution to a number of problems within the Commercial Accounts Section can be implemented in conjunction with the Army's transition to the Standard Installation Accounting Organization (SIAO). This is an effort to restructure installation level Finance and Accounting Offices to improve professional staffing and provide adequate accounting systems. As a part of this transition effort, clerical and technician positions are being reduced to provide the spaces needed for an increase in professional staffing. A December 1988 message from the Director of Finance and Accounting stated that voucher examiners were an example of positions that would be affected (3). The organizational restructuring presents an opportunity to move the Commercial Accounts Section directly

under Accounting Division Headquarters. This move would put the section under the supervision of "a professional accountant who has a knowledge of automated accounting systems" (Madden 5).

Improvements in the commercial accounts payable system can only occur through the coordinated efforts of all of the activities involved in the requisition, receipt, and payment processes. Solutions to problem areas which have been identified cannot be developed and implemented without considering the effects they will have on all of the other elements throughout WRAMC. A systemic approach is needed to resolve the problems with commercial accounts payable.

CHAPTER III

Conclusions and RecommendationsConclusions

A more efficient method for management of commercial accounts payable at Walter Reed Army Medical Center requires the interface of existing automated systems, an organizational restructuring of the Finance and Accounting Division, and establishment of a Vendor Liaison Office within the Directorate of Logistics.

WRAMC has evolved into a complex, increasingly decentralized and diversified organization. This has taken place without a similar evolution of the support system designed for management of commercial accounts payable. Although there have been a number of helpful improvements made within various areas, the improvements were not global enough to support the demands of a growing number of requesting and receiving activities. Now, however, with the current congressional emphasis on prompt payment to vendors, and the JCAHO's recognition of the need for improved financial practices, there is a requirement for an aggressive effort to make systemic changes that will improve the performance of commercial accounts payable. This project assessed the effectiveness of current accounts payable processes throughout all functional areas and identified problem areas which have contributed to difficulties

with prompt payment. The results indicate that the combined benefits of an interface of existing automated systems, which would streamline the accounts payable process, with an organizational structure, which would provide improved staffing and supervision, would resolve the problem of timely payment to vendors. A Vendor Liaison Office would serve as the point of entry into the system for questions and concerns regarding payments. Significant reductions in the amount of interest penalties paid, cost reductions from discounts earned, and improved vendor relations can be achieved through this improved method for efficient management of commercial accounts payable.

Recommendations

The following actions are necessary for implementing a more efficient method for management of commercial accounts payable:

1. The Director of Contracting must insure that purchasing agents are fully trained and prepared to implement the SAACONS tracking system for small purchases.

2. The Director of Information Management must coordinate with the Director of Logistics, the Director of Resources Management, and the Director of Contracting for installation of SAACONS terminals and preparation of user training programs that will allow designated activities to access the SAACONS database.

3. The Director of Contracting and the Director of Resources Management must coordinate with the Director of Information Management for the development and implementation of a system interface between SAACONS and CAPS.

4. The Commercial Accounts Section must be reassigned as the Accounts Payable Branch under the Accounting Division.

5. The Director of Resources Management must determine appropriate staffing for the Accounts Payable Branch.

6. The Director of Logistics must prepare for the expansion and redesignation of Vendor Control as the Vendor Liaison Office.

7. The Director of Logistics must coordinate with the Director of Contracting and the Director of Resources Management for development and implementation of programs to educate and improve communications with vendors.

APPENDIX A

Definitions¹

account payable- a liability representing an amount owed to a creditor, usually arising from a purchase of supplies or services.

block ticket- a listing of payment transactions used for control and routing through the payment process (FAD Document Processing 1).

cash discount- a reduction in sales or purchase price which is allowed for prompt payment.

confirming order- a contract offered and accepted by telephone (Broadus).

contract- any type of enforceable agreement or order for the procurement of supplies or services.

disbursement- a payment which satisfies an account payable.

¹Source for definitions, Neumann et al, unless otherwise indicated.

interest- the charge or cost for using money; frequently expressed as a rate per period, usually one year, called the interest rate.

discount- the difference between face or future value and present value of a payment.

discount rate- interest rate used to convert future payments to present values.

invoice- a document showing the details of a sale or purchase transaction.

lost discount- the sum of a discount offered for prompt payment that was not taken because of expiration of the discount period.

payable- unpaid but not necessarily due or past due.

payment date- a payment is considered made on the date that a check is prepared (FAD Document Processing 3).

payment due date- the date on which payment should be made (FAD Document Processing 2).

purchase order- a document that shows evidence that a sum of money was legally reserved against a particular appropriation and is signed by an agent (FAD Document Processing 3).

purchasing agent- a person with authority to obligate the government (Juste).

quantity discount- a reduction in purchase price as quantity purchased increases.

receiving report- any signed documentation that specifies that the government received particular supplies or services (FAD Document Processing 4).

trade credit- a debt arising through credit sales and recorded as an account payable by the buyer (Berman et al 699).

vendor- any person or organization engaged in a profession, trade, or business (FAD Document Processing 1).

voucher- a document that recognizes a liability and authorizes the disbursement of cash.

working capital- a firm's investment in short-term assets; cash, short-term securities, accounts receivable, and inventories (Berman et al 699).

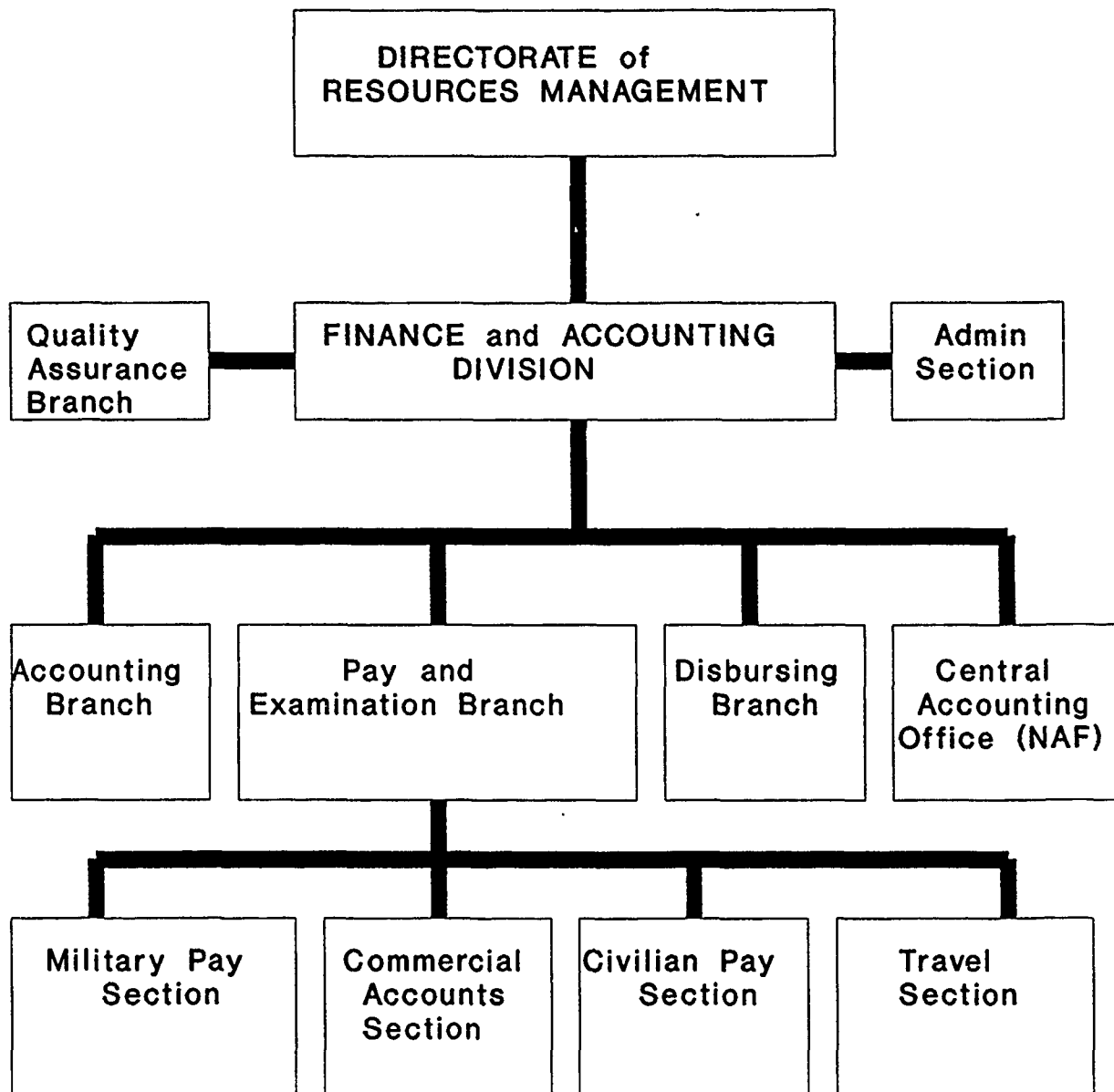
APPENDIX B

Walter Reed Army Medical Center

Organizational Chart

"REPRODUCED AT GOVERNMENT EXPENSE"

Finance and Accounting Division
Organizational Chart



APPENDIX D

Order for Supplies or Services, DD Form 1155

APPENDIX D

Job No. 6704-348 Expires Jul 31 1987

Mayes 59

CONTRACT/PURCH ORDER NO. V797P-8856K		2. DELIVERY ORDER NO. DADA158BFJJ52		3. DATE OF ORDER. 07/27/88		4. REQUISITION/PURCH REQUEST NO. W71FEC8200002B		5. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG 1 DO	
ISSUED BY DIRECTORATE OF CONTRACTING ATTN: WALTER REED ARMY MEDICAL CNTR WASHINGTON, D.C. 20307-5600 Garrison, Marguerite		CODE DADA15		7. ADMINISTERED BY Admin Inquiries See Block 6 Pay/Invoice Info See Block 15		CODE A01		8. DELIVERY FOB <input checked="" type="checkbox"/> DEST <input type="checkbox"/> OTHER (see schedule if other)	
CONTRACTOR AME AND ADDRESS BRISTOL LABORATORIES 2404 WEST PENNSYLVANIA EVANSVILLE IN 47701		CODE 660F9557		FACILITY CODE		12. DELIVER TO FOB POINT BY 28/22/88		11. MARK IF BUS. IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED	
SHIP TO Warehouse & Distribution Bldg Log 178 Forest Glen Station 1600 Linden Lane (WPAFC) Crown Spring, MD 29914-0291 DADA158BFJJ52		CODE 03E		19. PAYMENT WILL BE MADE BY Finance & Accounting Div. Bldg 11, Rm 112 Walter Reed Army Medical Center Washington, D.C. 20307-5600		CODE WPAFC		MARK ALL PACKAGES AND PAPERS WITH CONTRACT DATE NUMBER	
DELIVERY <input checked="" type="checkbox"/> This delivery order is issued on another Government order, or is applicable with and subject to terms and conditions of above numbered contract.									
PURCHASE Reference: GARY C. JUSTA furnished the following in terms specified herein.									
ACCEPTANCE: THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY BE MODIFIED AND AGREES TO PERFORM THE SAME.									
NAME OF CONTRACTOR: _____ SIGNATURE: _____ TYPED NAME AND TITLE: _____ DATE SIGNED: _____ <i>(If this box is marked, supplier must sign acceptance and return the following number of copies:)</i>									
ACCOUNTING AND APPROPRIATION DATA, LOCAL USE 11 1 891 8774 72-7453									
SCHEDULE OF SUPPLIES, SERVICE									
QUANTITY	DESCRIPTION	UNIT	RECEIVED	ACCEPTED	REMARKS	INITIALS	DATE	TOTAL	DIFFERENCES
2091	639E-31-127-9220 ETOFUSIDE 100 MG PER AMPULE #3695-95	EA					8/4	4540.63	
24. UNITED STATES OF AMERICA							25a. TOTAL		4540.63
25. QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> UNINSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED							25b. DIFFERENCES		
DATE _____ SIGNATURE OF AUTHORIZED GOVERNMENT REP. _____				31. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMT VERIFIED CORRECT FOR	
26. I certify this account is correct and proper for payment				DATE _____ SIGNATURE AND TITLE OF CERTIFYING OFFICER _____		34. CHECK NUMBER		35. BILL OF LADING NO.	
37. REC'D AT		38. RECEIVED BY		39. DATE REC'D		40. TOTAL CONT.		41. S/R ACCOUNT NUMBER	
42. S/R VOUCHER NO.									

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APPENDIX E

Vendor Invoice

BRISTOL-MYERS
U.S. PHARMACEUTICAL AND NUTRITIONAL GROUP
EVANSVILLE, INDIANA 47721

IMPORTANT CLAIMS OF DAMAGE, SHORTAGE, AND THE LIKE MUST BE MADE WITHIN 30 DAYS OF RECEIPT OF MERCHANDISE AND MUST BE ACCOMPANIED BY A SIGNED DELIVERY RECEIPT IF THEY ARE TO BE HONORED. ADDRESS ALL CLAIMS AND INQUIRIES TO: CUSTOMER SERVICE DEPT., BRISTOL-MYERS, EVANSVILLE, INDIANA 47721-0001. REMIT TO ADDRESS SHOWN BELOW

PTO WALTER REED MED CENTER
MATERIEL BRANCH WHESE 198
2461 LINDEN LANE
SILVER SPRING MD 20910
BILL TO COMMERCIAL ACCTS UNIT
WALTER REED ARMY MED CTR
WASHINGTON DC 20307
PAGE 1

FOR COMPANY USE ONLY				TERMS	PLEASE USE THESE REFERENCES ON REMITTANCES OR CORRESPONDENCE	INVOICE DATE	INVOICE NO
TOMER NO 74400	C/C 31	B/C 55	TERR. 10452	REPR +0+0	2 PCT/ 30, NET 45	08/08/88	372909
ORDERED FROM EDISON			TRANS CODE 32	BILL OF LADING NO 06925	SHIPPING DATE 08/08/88	CUSTOMER ORDER NO - DATE 07/27 DADA1588F3352	
QUANTITY	PRODUCT		PRICE	EXTENSION			
	ITEM NO	NAME	UNIT SIZE				
00	UN 309575	VAPESIO 1.0 100MG/5ML	VIAL	58.01	4,640.80		
00	TOTAL UNITS		TOTAL WEIGHT		4,640.80		

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8/15

I certify that the above bill is correct and just; that payment therefor has not been received.

BY Jeffery S. Wilson

PLACED BY MAIL DEPT PHONE TIME 14 41 DATE 08/09/88 01-03
1 76 UPSN

INVOICE NO 372909 INVOICE DATE 08/08/88

TO INSURE PROPER CREDIT PLEASE RETURN THIS STUB WITH REMITTANCE D-U-N-S 00-637-0092

TERMS 2 PCT/ 30, NET 45

YOU MAY DEDUCT A DISCOUNT OF \$92.82 IF PAID BY 09/07/88.

CUSTOMER NO	CHAIN I/D
093420	5

REMIT TO
BRISTOL-MYERS USPNG - 093420
P. O. BOX 10331
NEWARK, NJ 07195
DO NOT SEND ORDERS TO THIS ADDRESS

ORDER NO. DADA1588F3352

INVOICE AMOUNT 4,640.80

APPENDIX F

Receiving Report, DD Form 1155

TL 88-11-3

1. CONTRACT/PURCH ORDER NO. V7979-5250K		2. DELIVERY ORDER NO. DADA1588F3352		3. DATE OF ORDER 07/27/88		4. REQUISITION/PURCH REQUEST NO. W71PECB2000026		5. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG 100	
ISSUED BY DIRECTORATE OF CONTRACTING ATTN: ALTER REED ARMY MEDICAL CNTR WASHINGTON, D.C. 20307-5000 Carrison, Marguerite		CODE DADA15		7. ADMINISTERED BY Code A01		8. DELIVERY FOB (X) DEST () OTHER (see schedule if other)		9. MARK IF BUS. IS () SMALL () SMALL BUSINESS-ADVANTAGED () WOMEN-OWNED	
CONTRACTOR NAME AND ADDRESS 2404 WEST PENNSYLVANIA EVANSVILLE IN 47701		CODE 00009557		FACILITY CODE		10. DELIVER TO FOB POINT B 08/20/88		11. DISCOUNT TERMS 2 % 2 Net 30	
				12. MAIL INVOICES SEE BLOCK 15					

ENTERED
9/15
11-14

12. PARTIAL WILL BE MADE BY Finance & Accounting Div Bldg 11, Rm 124 Walter Reed Army Medical Cntr Washington, DC 20347-5000		13. ALL PACKAGES AND PAPERS CONTRACT OR ORDER NUMBER	
------------------------------------------------------------------------------------------------------------------------------------------	--	---------------------------------------------------------------	--

DELIVERY This delivery order is issued on another delivery order agency or in accordance with the terms and conditions of above numbered contract.

PURCHASE Reference our BONNIE BROWN furnish the following in terms specified herein.

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER SUBJECT MATTER SPECIFIED HEREIN AND AGREES TO PERFORM THE SAME IN ACCORDANCE WITH ALL OF THE TERMS AND CONDITIONS OF THE ORDER AND AGREES TO PERFORM THE SAME.

MADE OF CONTRACT R SIGNATURE TYPED NAME AND TITLE
If this box is marked, supplier must sign acceptance and send the following number of copies.

ACCOUNTING AND INFORMATION CATALOGICAL USE
FORM NO. 119
8-18-88C

QUANTITY	DESCRIPTION OF SUPPLY OR SERVICE	QUANTITY ORDERED, ACCEPTED*	UNIT	UNIT PRICE	TOTAL AMOUNT
200	3095-11-007-1 00 DISPOSING 100 MG PFR AMPULE 3095-95	20	VI	23.00	460.00

If quantity accepted by the Government is same as quantity ordered, indicate by x. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
By: Gary C. Juste
CONTRACTING/ORDERING OFFICER

25. TOTAL 4640.89

27. DIFFERENCES

26. QUANTITY IN COLUMN 20 HAS BEEN
[] INSPECTED [] RECEIVED [] ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED

27. SHIP. NO.

28. D.O. VOUCHER NO.

29. PAID BY

30. INITIALS

31. PAYMENT
[] COMPLETE
[] PARTIAL
[] FINAL

32. AMT VERIFIED CORRECT FOR

33. CHECK NUMBER

34. BILL OF LADING NO.

DATE 11-3-88 SIGNATURE OF AUTHORIZED GOVERNMENT REP. Sherry Jamison

DATE SIGNATURE OF ACCOUNTABLE OFFICER'S OFFICER ROBERT H. MINNICK
CPT, MS

37. REC'D AT 178

38. RECEIVED BY W. Lewis

39. DATE REC'D 7-18

40. TOTAL CONT. 1

41. S/R ACCOUNT NUMBER 8200-0028

42. S/R VOUCHER NO.

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APPENDIX G

Payment Voucher, SF 1034

SF 1034-EDP PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

DEPARTMENT OF THE ARMY
FINANCE & ACCOUNTING OFFICE
WASHINGTON DC 20307-5001

APPENDIX G

VOUCHER NO.

204336

DATE PREPARED 11/18/88

CONTRACT NO./DATE DADA15-88-F-3352

07/27/88

PAID BY

Account of:

TAX ID
PAYEE'S BRISTOL-MYERS USPNG- 093420
NAME P.O. BOX BOX 10331
ADDRESS NEWARK, NJ 07195

DSSN 6352
WASHINGTON DC 20307-5001

WALTER REED AMC
WASH DC 20307

DATE INVOICE RECEIVED 08/15/88
DISCOUNT TERMS 2.00 30 DAYS

FOB:
DEST

DEC 01 1988

DSSN 6352

NO.	DATE	DATE OF PERFORMANCE	AMOUNT
072909	08/08/88	11/03/88	4,401.80

TOTAL: 4552-

4640.80

213 DISC-

92.82

AMOUNT VERIFIED CORRECT FOR \$:

4547.98

SIGNATURE OR INITIALS: 98' *WRL*

WRL Pec 9200 0028 80

PAYMENT: 1 FINAL

12/02/88

PURSUANT TO THE AUTHORITY VESTED IN ME, I CERTIFY THAT THIS VOUCHER IS CORRECT AND PROPER FOR PAYMENT.

AUTHORIZED CERTIFYING OFFICER

G.D. Broadus

DATE: 11/18/88

FOR: G.D. BROADBUS
FINANCE & ACCOUNTING OFFICER
MAJ FC

ACCOUNTING CLASSIFICATIONS

21X4991.74 7453 S49024 US LC91

4547.98

PAYEE; BRISTOL-MYERS USPNG- 093420
P.O. BOX BOX 10331
NEWARK, NJ 07195

CHECK AMT \$: 4547.98

CHECK NO.: 2271680

ON US TREASURY DATE:

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APPENDIX H

Format for Vendor Interviews

1. Name:
2. Representing:
3. What is the approximate dollar volume of supplies provided by your firm to WRAMC each year?
4. What type of discounts are offered?
5. Has your firm had difficulty in receiving timely payments from WRAMC?
6. If so, what do you think is the main reason for the delay?
7. Has your firm ever received duplicate payments for supplies?
8. What, in your opinion, can be done to resolve these payment difficulties?
9. What point of contact at WRAMC does your firm use when experiencing difficulties with timely payment?
10. Are you familiar with the payment process at WRAMC?

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DEPARTMENT OF THE ARMY
 WALTER REED ARMY MEDICAL CENTER
 WASHINGTON, D.C. 20307-5000

REPLY TO
 ATTENTION OF:

HSHL-CS

31 May 1989

MEMORANDUM THRU: Colonel Donald A. Johnson, Chief of Staff, Walter Reed Army Medical Center, Washington D.C. 20307-5001

FOR: Residency Committee, US Army-Baylor University Graduate Program in Health Care Administration (HSHA-IHC), Academy of Health Sciences, US Army, Fort Sam Houston, Texas 78234-6100

SUBJECT: Graduate Management Project

In accordance with the instructions contained in the Administrative Residency Manual, subject GMP is submitted on Lieutenant Colonel Tommy W. Mayes, Administrative Resident, Walter Reed Army Medical Center.

TOMMY W. MAYES
 LTC, MS
 Administrative Resident

- 2 Encls
 1. DD Form 1473
 2. GMP

"REPRODUCED AT GOVERNMENT EXPENSE"

Accession For	
DTIC GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



ACKNOWLEDGMENTS

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