MICROSCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS

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1.25
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A Space Utilization Study in the
Outpatient Records Branch,
U. S. Army Medical Department Activity,
Fort Ord, California

by
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CPT, MSC

Submitted in Partial Fulfillment
of the Requirements for
Administrative Residency

23 October 1979
A SPACE UTILIZATION STUDY IN THE OUTPATIENT RECORDS BRANCH U.S. ARMY MEDICAL DEPARTMENT ACTIVITY, FORT ORD, CALIFORNIA

CAPTAIN KENNETH W. LEISHER

The purpose of this study was to analyze the functioning organization of the Outpatient Records Branch at MEDEVAC, Fort Ord, California and determine the optimal feasible physical layout for this department.
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I. INTRODUCTION

The system which will be analyzed within this paper is the physical layout of the Outpatient Records Branch, Silas B. Hays Army Hospital, Fort Ord, California.

This study was initiated at the request of the Chief, Patient Administration Division, Silas B. Hays Army Hospital. The Outpatient Records Branch supervisor had complained to the Chief, Patient Administration Division, that the current physical layout did not allow sufficient space for filing and maintaining records. This same problem was also cited as a finding on the 1979 Annual General Inspection at Silas B. Hays Army Hospital.¹

The purpose of this study is to analyze the functioning of the Outpatient Records Branch and determine the optimal feasible physical organization for this department. The plan of analysis includes, but is not limited to direct site analysis, inquiry techniques, and use of modeling and flow charts to describe the existing system, identify possible alternatives, and select the optimal feasible solution.
II. ANALYSIS

Existing System

The Outpatient Records Branch is responsible for custodianship and maintenance of all outpatient treatment records and health records located within Silas B. Hays Army Hospital. The records section is organized under the control of the Patient Administration Division (Figure 1).

Figure 1. Organizational Structure

Staffing of the Outpatient Records Branch is based upon Table of Distribution and Allowances WSW2Q4AA dated 1 September 1978 (Table 1).

Table 1. Staffing Outpatient Records

<table>
<thead>
<tr>
<th>Authorized</th>
<th>Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS-5 Supervisor</td>
<td>1</td>
</tr>
<tr>
<td>GS-4 Lead File Clerk</td>
<td>1</td>
</tr>
<tr>
<td>GS-3 File Clerk</td>
<td>10</td>
</tr>
</tbody>
</table>

*Excess file clerk is a hire lag.
Silas B. Hays Army Hospital is scheduled for a manpower survey in December, 1979. The work unit for outpatient records is number of clinic visits. Based upon workload data for Fiscal Year 1979 and the performance of additional functions required by Ambulatory Patient Care Model 5 or local conditions which are not recognized in DA Pamphlet 570-557, June 1974, Staffing Guide for U. S. Army Medical Department Activities, the outpatient records branch is requesting a total of eighteen personnel. Workload data can be found in Appendix A. The importance of the number of assigned personnel will be evident in the discussion of available alternatives.

The functions performed by the Outpatient Records Branch support its responsibilities of custodianship and maintenance of outpatient treatment and health records. The functions include:

1. Initiate records, request records from, and/or forward records to other installations.

2. Maintain nominal cross-index file for those records filed by terminal digit.

3. Prepare patient recording cards for all patients and monitor for maximum utilization by patients and staff.

4. Operate a record control program to assure the delivery, return and followup of records removed from the records room.
5. Coordinate with military personnel support activities on matters pertaining to health record processing for incoming and departing members and periodic health record inventories.

6. Coordinate with the professional staff on the screening of incoming health records.

7. Provide specialized management of those records containing sensitive medical data or for personnel in special category programs; e.g., the personnel reliability program.

8. Review of health records and outpatient treatment records to assure complete identification data, complete entries, and the proper filing of forms.

9. Assist the Medical Records Administration Branch in coordinating support of ambulatory medical care evaluation and documentation review of health records and outpatient treatment records.

10. Assist the Medical Services Account Officer in ambulatory care payment or reimbursement as appropriate.

The Outpatient Records Branch is located on the first floor of the hospital. The records room is conveniently located in the proximity of the emergency room, family practice, acute minor illness clinic, and general outpatient clinic--areas wherein many instances records are not
pulled in advance because of walk-in patients or same day appointments.
The location of Outpatient Records Branch in relation to other functions in the immediate area is depicted in Appendix B. It should be noted that the outpatient records and inpatient records (part of Medical Records Administration Branch) are stored in the same large room. The dotted line separating the two areas is actually a row of shelving containing outpatient records on one side and inpatient records on the other side. This co-location of records has an important influence upon the various alternatives which will be discussed later.

A detailed layout of the Outpatient Records Branch is contained in Appendix C. The treatment records are filed according to the Terminal Digit File System in thirty-six sections of open shelving (numbered 1-36 in Figure C-1). Each section of shelving is seven shelves high. This room also contains addressograph machine to print patient information cards, a work table for maintenance of records, a locker for personal effects of employees, a wall locker for storage of supplies, a desk in the breakdown area, a distribution area for records sent to and returned from the clinics, and a small office for the chief of the Outpatient Records Branch. A legend in Appendix C indicates where the various equipment is located. Appendix C also contains photographs of the type of shelving used to store records, the work area for maintenance of records, and available aisle space.
The Outpatient Records Branch stores approximately 78,750 outpatient health records. This number was calculated by actually counting records in random rows, averaging those rows, and multiplying by the total number of rows. Approximately 6,000 outpatient records are stored in a warehouse on Fort Ord (about three miles from the hospital). These are records which will be retired to St. Louis at the end of the current calendar year. It is necessary to store these records in the warehouse because the hospital records area is not large enough to store four years of outpatient records. This practice requires outpatient records personnel to make frequent trips across post to retrieve outpatient records for personnel now seeking medical care who were last seen four years ago.

The majority of appointments at Silas B. Hays are made by the Central Appointment System. Outpatient Records Branch receives a list of appointments one day in advance. The records are retrieved by records room personnel and placed in clinic distribution boxes within the Outpatient Records Branch. Clinic personnel pick up the records on the day of appointment. Records are returned to the Outpatient Records Branch by clinic personnel. Patients are not allowed to handcarry their records from a clinic unless they have another appointment that day.

As mentioned earlier, certain clinics in the hospital see patients on a walk-in basis or same day appointment patients. Thus personnel must
be available in outpatient records throughout the day to retrieve records. Records must also be retrieved for various administrative purposes; i.e., correspondence requests, legal requests, audits, posting laboratory tests, etc.

Future Impacts

A recent study conducted at Fort Benning, Redstone Arsenal, and Brooke Army Medical Center will, if implemented, have considerable impact upon the optimal feasible physical layout of Outpatient Records Branch. The medical treatment facilities referenced above conducted a one-year study to determine the feasibility of converting the inpatient record from hard copy to microfiche. The results of this study have been forwarded to Health Services Command where action is currently underway to draft Health Services Command's proposal for Army-wide implementation. This proposal will be forwarded through The Surgeon General of the Army for review and recommendation, and then to The Adjutant General's Office for approval or disapproval. A detailed layout of the Medical Records Administration Branch is described in Appendix D. The inpatient records are stored in the same type of shelving as used in the outpatient records section (1-19, Figure D-1). If these records were converted from hard copy to microfiche, the 19 sections of shelving could be reduced to one filing cabinet. The outpatient records storage area could then be expanded to allow sufficient space for filing and maintenance of outpatient records.
Although the Outpatient Records Branch follows a vigorous program of retiring records when patients are not seen for four years, the number of outpatient records has been increasing each year and can be anticipated to continue this trend in future years. This is primarily due to the number of births exceeding the number of deaths and retirees moving into this area. The number of active duty troops at Fort Ord has remained relatively stable or decreased slightly.

Problems in the Existing System

The problems which can be identified from physical layout diagrams and from direct-site observation and interviews can be summarized as follows:

1. Army regulations require that four years of outpatient treatment records be maintained at the Army Treatment Facility. Current space allocation for Outpatient Records Branch only allows for storage of three years of outpatient treatment records. The fourth year must be stored in a warehouse across post. This storage arrangement causes two problems:

   a. Outpatient records branch personnel must make trips across post at least once a week to retrieve records of personnel presenting for medical care.

   b. If it is not known when the patient was last seen, the warehouse may not be checked if records cannot be located in the Medical Treatment Facility storage area. The outpatient treatment record is then classified as lost and a new record is initiated.
2. There is insufficient space for maintenance of outpatient treatment records.

3. There is insufficient aisle space between records to allow for efficient retrieval of records.

Criteria and Constraints

The following criteria were used to evaluate the alternatives:

1. Allows sufficient increase in square footage (52 square feet) to store records currently stored across post.

2. Allows sufficient increase in space to provide work areas for maintenance of records.

3. Allows sufficient aisle space to efficiently retrieve records.


The following constraints apply:

1. Increases in personnel costs because of changes in pay grade or differential pay must be within budgetary limitations.

2. Regulatory requirements must be met for purchase of filing equipment.

3. Implementation of an alternative system will not adversely impact upon functioning of another activity within the hospital.
III. DESIGN

Alternatives to the Existing System

1. Increase the number of work shifts. By increasing the number of work shifts and keeping the total number of employees constant, there are fewer people working at any one time, resulting in increased space for maintenance of records.

2. Purchase space saving equipment. This alternative was not considered for the outpatient records because personnel must have access to all rows of records simultaneously and several personnel must have access to the records at the same time. Space saving equipment mounted on tracks or rotary drum storage would result in excessive waiting time for records personnel. This alternative was considered for inpatient records storage. However, this equipment would become obsolete if the inpatient records were converted to microfiche. Although conversion is not certain, it is highly likely. This type of shelving would be tailored to treatment records and could not be converted to an alternative use because of the track system and storage characteristics. It is therefore not considered feasible to purchase space saving equipment until a decision is made concerning conversion of the inpatient record to microfiche. If the decision is made to retain the hard copy inpatient record, this alternative could be reassessed regardless of which alternative is chosen.

3. Transfer more records to the warehouse across post. Reducing the number of records in the Outpatient Records Branch would leave more...
room for maintenance of records.

4. Reorganize the medical records storage area. Reorganization of only the outpatient records branch would not result in the gain of sufficient space to solve the problems identified in the existing system. Almost all of the space in outpatient records is used for storage of records. However, the inpatient records storage area currently has sixteen desks for clerical personnel occupying prime records storage space (see Figure D-1). Some of these clerical personnel, such as the correspondence section and statistician would operate more efficiently in an office-type semiprivate setting. Thus the task is to find space for some of the clerical personnel and then reorganize the outpatient and inpatient records storage areas. There is an abundance of vacant space on the eighth floor of the hospital and some vacant space on the seventh floor. However, the clerical personnel identified as able to move all need to be in the vicinity of the inpatient records and/or outpatient records, and some--such as the correspondence section--have frequent interaction with patients. Thus a move to the seventh or eighth floor would seriously degrade the efficiency of any of these clerical personnel in addition to causing supervisory problems.

Other activities on the first floor were analyzed to determine if they could possibly be moved to another area. The immunization clinic was one such activity. Figure B-1 shows current location of immunization clinic. If the immunization clinic could be moved, medical board and
CHAMPUS Advisor could move into the immunization clinic providing office space for clerical personnel in Medical Records Administration Branch. The most logical choice for immunizations seemed to be in the allergy clinic. Several problems developed with this move. The allergy clinic had a room available, but there was no running water in the room (this could be corrected). Of a more serious nature is the location of the EEG room. The EEG room is located in the middle of the allergy clinic. Although supposedly soundproof, the EEG's are affected by loud noises such as crying children. The immunization clinic has more than their share of crying children. Since movement of the EEG room does not seem feasible, it is not feasible to move immunizations to the allergy clinic. No other area could be found for immunizations which would meet all of its needs.

Two alternatives were determined to be feasible:

a. (1) Movement of correspondence into the Admission and Disposition waiting room (shown in Figure B-1); (2) movement of medical boards section to an office in the Eyes, Ear, Nose and Throat (EENT) Clinic; (3) movement of statistician and writers into current medical boards office (shown in Figure B-1).

The Admission and Disposition waiting room would have to be partitioned to provide room for two desks and filing equipment. Electrical outlets would also have to be provided along with lighting and telephone service. The remainder of the Admission and Disposition waiting room would retain its current purpose. This waiting room is seldom used to its full capacity, Monday morning sometimes being an exception. Clinics
may have to be given times to preadmit nonemergency admissions to avoid patients waiting in the hallways on Monday mornings.

The Chief of EENT has agreed to release one office for the use of medical boards. The changing of phone numbers should be the only necessary change. Telephones also pose the only problem in moving the statistician and writers into the current medical boards office. The revised physical layout is depicted in Figure 2 (see page 14).

b. (1) Movement of Chief, Secretary and NCOIC, Department of Primary Care and Patient Affairs Liaison Officer (shown in Figure B-1) to second floor offices currently occupied by Chief, Secretary and NCOIC, Department of Surgery.

(2) Movement of Chief, Secretary and NCOIC, Department of Surgery, into the Surgical Conference Room and break room.

(3) Movement of Medical Boards, Correspondence Section, CHAMPUS Advisor and Statistician to offices vacated by Primary Care and Patient Assistance Officer.

(4) Movement of writers and auditors into areas vacated by CHAMPUS Advisor and Medical Boards.

There is a difference of opinion as to whether or not the efficiency of Primary Care would be degraded if moved to the second floor. Since the hospital-based functions under the control of Primary Care are all on the first floor, efficiency would probably be degraded to some extent. There is no question that a large number of complaints are resolved by the
Figure 2. Revised Layout
Patient Assistance Officer. Movement of this function to the second floor would also move the complaints to the second floor and closer to the next level (Clinical Support Division), with the possible result of fewer complaints solved at the lower level.

Moving the Chief, Secretary and NCOIC Department of Surgery into the surgical conference room and break room would require engineer support in the form of partitions and lighting. There are three conference rooms in the hospital (in addition to surgical conference room) which are not fully utilized, and scheduling of a conference room should present no problem. There is also a designated break room in the hospital. Movements between medical boards, CHAMPUS, statistician, and auditors would require little support except for change of telephone. The revised physical layout is depicted in Figure 5. (See page 16.)

5. The removal of interior walls between the current medical boards office, Admission and Disposition, and the copy machine room was also contemplated. Since clerical functions moving from the records storage area are better suited to a semiprivate office setting, this alternative was not considered feasible.

6. The final alternative considered was to maintain the current physical layout until the inpatient record is converted to microfiche. This alternative was not considered feasible for two reasons:

a. Although it is highly probable that the records will be converted, it is not certain.
b. Although the implementation procedures for microfiche conversion are uncertain, the recommendation is conversion occur over a five-year period. (One year of hard copy records would be replaced by microfiche each year.) Even if Silas B. Hays started conversion in October, 1980 (very optimistic), the conversion would not be completed until 1984.

Advantages/Disadvantages of the Alternatives

1. Increase the number of work shifts.
   a. Advantages.
      (1) Could be implemented quickly. A change in shifts requires three weeks' notice to union officials.
      (2) Relatively inexpensive. The outpatient records branch already has three individuals working until 2130 hours on weekdays and from 1000-1830 hours on weekends. A new shift could start work at 0630 or 0700 hours with no increase in differential pay.
   b. Disadvantages.
      (1) Only solves the problem of increased area for maintenance of records. Does not alleviate the other two problems.
      (2) Would increase the number of hours the file clerks work without supervision.

2. Purchase space saving equipment. Not considered feasible at this time.

3. Transfer more records to warehouse across post.
a. Advantages.
   (1) Would meet two of the criteria (additional space for maintenance of records, and increased aisle space).
   (2) Requires no outlay of funds.

b. Disadvantages. Increases the number of trips across post necessary to retrieve records and also increases chances of records being classified as lost when they are, in fact, located in the warehouse.

4. Reorganization of Records Storage Area.
   a. Movement of Correspondence and Medical Boards.
      (1) Advantages.
          (a) Would provide sufficient space to resolve the problem of storing records in separate areas and alleviate the other two problems.
          (b) Requires the minimum number of moves and lesser impact upon other hospital activities.
      (2) Disadvantage. Admission and disposition waiting room would be drastically reduced, possibly requiring scheduling of nonemergency admissions on certain days.

   b. Movement of Primary Care, et. al.
      (1) Advantage. Would provide sufficient space in outpatient records to resolve all three problems.
      (2) Disadvantages.
          (a) Degradation of efficiency in Department of Primary Care and Community Medicine.
          (b) Increased number of complaints reaching higher level.
(c) Strong opposition. This alternative would cause a considerable amount of animosity in key MEDDAC personnel.

The Optimal Feasible Solution

Based upon the ability to meet the criteria, operate within Constraints, and Analysis of Advantages and Disadvantages, Alternative 4a, Movement of Correspondence and Medical Boards, and reorganization of the outpatient records branch in accordance with Appendix E, is determined to be the optimal feasible solution.
IV. IMPLEMENTATION

General

The Chief of Patient Administration Division should appoint a project officer to coordinate the actions necessary to implement the optimal feasible solution.

Phase I. Project officer should coordinate with Logistics Division and:

1. Initiate work order to accomplish necessary modifications in the Admissions and Dispositions Waiting Room.
2. Determine types of desk/table to be used for maintenance of records. Initiate necessary paperwork.
3. Determine if shelving located in Room 707 and/or warehouse across post is adequate to store additional records currently in warehouse.
4. Supervise move of medical boards into EENT clinic and statistician and writers into current medical boards office.

Phase II. Completion of Modifications in Admission and Disposition Waiting Area.

1. Supervise move of Correspondence Section into Admission and Disposition waiting area.
2. Implement reorganization in outpatient records branch as described in Appendix E.
V. RECOMMENDATIONS

The following course of action is recommended to provide the optimal feasible physical organization of the outpatient records branch, Silas B. Hays Army Hospital.

1. Relocate Medical Boards and Correspondence Sections as discussed in Alternative 4a.
2. Relocate Statistician and Writers into current Medical Boards Office.
3. Move shelving which divides inpatient and outpatient records storage area $5.5$ feet into inpatient records area.
4. Reorganize outpatient records branch as discussed in Appendix E.
5. This study should not be implemented unless all outpatient records are stored in one central location at Silas B. Hays Army Hospital.
FOOTNOTES

1 Interview with Major John H. Grosshans, Chief, Patient Administration Division, U. S. Army Medical Department Activity (MEDDAC) Fort Ord, Fort Ord, California, 23 August 1979.

2 Fort Ord MEDDAC Regulation 10-1, 1 October 1978, p. 3-45.

3 Interview with Ms. Pamela A. Nickoli, Chief, Outpatient Records Branch, U. S. Army Medical Department Activity (MEDDAC) Fort Ord, Fort Ord, California, 11 September 1979.

4 Telephonic interview with Ms. D. Beverly, Medical Records Administration, Headquarters, Health Services Command, Fort Sam Houston, Texas, 11 October 1979.

5 Army Regulation 340-18-9, 10 August 1977, page 27.
APPENDIX A

WORKLOAD DATA OUTPATIENT RECORDS
MANPOWER SURVEY REPORT - SCHEDULE X - MANPOWER AND WORKLOAD DATA

<table>
<thead>
<tr>
<th>MAJOR STAFF ELEMENT</th>
<th>DIVISION</th>
<th>BRANCH</th>
<th>SECTION OR UNIT</th>
<th>SHEET NO.</th>
<th>LINE NO.</th>
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<td>SBHMH</td>
<td>PAD</td>
<td>Outpatient Records</td>
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DESCRIPTION OF WORK PERFORMED:
Same as indicated in Yardstick Code 557-55.2 plus provides support for information desk.

YARDSTICK CODE

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<th>Current Req</th>
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<th>WO</th>
<th>ENL</th>
<th>US CIV</th>
<th>NON-US CIV</th>
<th>TOTAL MANPOWER SUBJ TO ALLOC</th>
<th>OTHER MANPOWER</th>
<th>TOTALS</th>
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ACRM UNIT

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<td>13</td>
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<td>18</td>
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<td>1</td>
<td>18</td>
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YARDSTICK ALLOWANCE COMPUTATION

SECTION A - SUMMARY OF MANPOWER

SECTION B - PERFORMANCE DATA

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<tr>
<th>YEAR AND MONTH</th>
<th>AVG</th>
<th>TOTAL MAN- HOURS WORKED</th>
<th>HRS OP IN WRK</th>
<th>EQUIV MAN-HRS PER MONTH</th>
<th>WORKLOAD</th>
<th>NO. OF WORK UNITS</th>
<th>W’L PER PERSON</th>
<th>ALLOC</th>
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1. WORKLOAD USED AS BASIS OF APPRAISAL
2. AVERAGE PRODUCTIVITY
3. MANPOWER ALLOWANCE

AMS CODE: 847792.11400
TDA PARA: 018C

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.
1. The Work Unit for the Outpatient Medical Records Branch does not reflect the fact that the branch maintains the Health Records of all active duty MEDDAC and DENTAC personnel (approximately 643), the Health Records on all officers in the grade of 06 and above, and the Health Records on all active duty personnel assigned to the Family Practice Clinic.

2. DA Pamphlet 570-557, Jun 74, Staffing Guide for US Army Medical Department Activities, does not adequately reflect current staffing requirements due to changes in mission requirements (i.e., implementation of AFC Model 5). Reference Letter, USOP-PR, Subject: Management of Outpatient Medical Records, 27 Aug 79, which reflected current reevaluation of staffing guides.

3. Local factors affecting manpower requirements:

   a. The Outpatient Medical Records Branch is currently staffed 7 days a week. Shifts are scheduled as follows:

      | Day             | Time    | Staff |
      |-----------------|---------|-------|
      | Monday - Friday | 0730 - 1615 | 10 persons |
      |                 | 1300 - 2130 | 3 persons |
      | Saturday & Sunday | 1000 - 1830 | 1 person |

   The branch provides records for appointments made through the CAS and for walk-in commitments. The evening and weekend shifts provide support for the ETR and AMIC. The AMIC is open in the evenings and on weekends. This patient service increases the workload of those shifts significantly.

   b. As stated in para 1 above, the Outpatient Medical Records Branch also maintains Health Records on numerous active duty personnel.

   c. The hospital Information Desk is physically located at the Outpatient Medical Records counter and is currently manned only by Red Cross volunteers on a sporadic basis. This shifts the responsibility for providing requested information to the Outpatient Medical Records Branch personnel on duty at the counter, thereby increasing their workload.

   d. The physical plant of the Outpatient Medical Records Branch is extremely limited. Adequate work space is not available. File Clerks must alternate use of work tables and/or must perform clerical functions (screening of records, preparation of new records) standing in their file areas.

4. Justification of recommended manpower:

   a. The Medical Records File Supervisor has direct control and supervision of all personnel assigned to the section.
b. The Medical Records Lead File Clerk provides work level expertise to all personnel, provides training for new and old records personnel, provides training for reservists, coordinates delegation of workload, and serves as assistant supervisor in the absence of the supervisor.

c. The Medical Records File Clerks retrieve and file medical records for appointments and walk-in commitments, file loose medical documents, prepare new records, prepare PRCs, prepare Nominal Index cards and file them, answer telephone inquiries, transfer loose medical documents, transfer medical records, screen microfiche for correct SSN's and units for AD personnel, and screen medical records for completeness and correct filing sequence. Weekly averages were determined for the majority of the functions listed above. The following computations are the resultant:

11,063 file transactions/week @ 2.5 min/transaction = 27,657.5 min or 460.95 manhours/week
332 personal contacts/week @ 3 min/contact = 996 min or 16.6 manhours/week
254 new records made/week @ 3 min/record = 762 min or 12.7 manhours/week
384.90 Patient Recording Cards (PRC)/week @ 1.5 min/PRC = 577.35 min or 9.62 manhours/week
290 Nominal Index Cards made and filed/week @ 3 min/card = 870 min or 14.5 manhours/week
155.1 telephone calls/week @ 2 min/call = 310.2 min or 5.17 manhours/week
175.45 documents transferred/week @ 2.5 min/document = 438.65 min or 7.3 manhours/week
295 documents screened/week @ 1.5 min/document = 442.5 min or 7.37 manhours/week
127.82 records transferred/week @ 5 min/record = 639.1 min or 10.65 manhours/week

for a total of 544.86 manhours/week or 13.62 full-time personnel @ 40 manhours/week

Computations have not allowed for screening of medical records (a regulatory requirement), for training time, and normal nonproductive time (preparation for actions, restroom breaks, etc).

d. One Medical Records File Clerk is responsible for sorting incoming and outgoing distribution to all hospital clinics, health clinics, TMC's, and terminal digit color groups in the outpatient Medical Records Branch; for logging and distribution of physical profiles; for implementation of the record retrieval system; for pulling appt rosters; and for assisting with the window as needed. Individual sorts approximately 4,576 documents per week. At 10 seconds per document, this procedure requires approximately 12.7 hours per week, or 2.5 hours per day.
Individual processes approximately 87.5 profiles per week. At 4 minutes per profile, this procedure requires approximately 6 hours per week or 1.2 hours per day. The retrieval system requires approximately 12.85 hours per week or 2.6 hours per day. Individual spends approximately .5 hours per day with physical distribution to labs and clinics. Individual spends 1 hour per day pulling records for appointments. Averages do not leave sufficient time for authorized breaks, lunch hour, and normal nonproductive time.

e. Request that an NCO in the grade of SSG-E6 be assigned to OPR Section to act as Troop Medical Clinic NCO with supervisory responsibility for 71G personnel assigned to TMC's F2, F3, F4, F5 and Health Clinics at Fort Hunter Liggett and Presidio of Monterey. HSC in a letter dated 28 August 1979, subject: (OHR) and (HR) has directed the realignment of administration and control of OTR and HR back to PAD and the establishment of a single focal point for management of all medical record systems. In practice, this will transfer the functional responsibility for OTR and HR from Dept of Clinics to PAD. At least one additional NCO will be required to insure that proper management and effective control is maintained. At present, there are approximately 40,000 records on file at these TMC's and Health Clinics, and a projected requirement of 10 71G's in the grade of E4 or below, to maintain them. These figures alone would justify the allocation of an additional E6 position. Primary functions would be as follows:

1. Direct control and supervision of all personnel assigned to TMC's.
2. Liaison visits to insure that Chief, Patient Administration Division's policies are carried out.
3. Inspection visits to insure that records are properly maintained.
4. Conduct searches for lost records.
5. Resolve conflicts, real or potential between various TMC's or hospital and TMC's.

It is further felt that if PAD is now charged with the responsibility of the maintenance and management of over 40,000 records scattered in an area of over 100 miles, the NCOIC is a definite necessity.
SCHEDULE X S 9, L 8 CONTINUATION SHEET

SEC D. SPECIFIC REMARKS (CONT)

1. COMMANDING OFFICER

5. Recommend the following:

<table>
<thead>
<tr>
<th></th>
<th>Position</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>CIV Medical Records File Supervisor</td>
</tr>
<tr>
<td>1</td>
<td>CIV Medical Records Lead File Clerk</td>
</tr>
<tr>
<td>14</td>
<td>CIV Medical Records File Clerk</td>
</tr>
<tr>
<td>1</td>
<td>CIV Medical Records File Clerk (Distribution)</td>
</tr>
<tr>
<td>1</td>
<td>NCOIC Outpatient/Health Records Supervisor</td>
</tr>
<tr>
<td>18</td>
<td>Total</td>
</tr>
</tbody>
</table>
APPENDIX B

PHYSICAL LAYOUT OF PATIENT ADMINISTRATION DIVISION

AND ADJACENT AREA
Figure B-1. Layout of PAD and Adjacent Area
APPENDIX C

PHYSICAL LAYOUT OF OUTPATIENT RECORDS BRANCH
Figure C-1. Layout Outpatient Records Branch
LEGEND FOR C-1

1-36  Shelving for outpatient records
37    Addressograph machine
38    Office, Chief Outpatient Records
39    Distribution boxes
40 & 41 Lockers for storage of supplies
42    Desk for records breakdown area
43    Table for coffee pot
44    Work area for maintenance of records
45    Employee lockers
46    Pillar

33
Photograph C-1 and C-2 both show the center aisle in the outpatient records room. Although it appears in Photograph C-1 that the center aisle is very wide, Photograph C-2 shows that one person retrieving records blocks the entire aisle.

During the time I was analyzing the records room, there were always three or four people in one aisle, as shown in Photograph C-3.

Photograph C-4 shows the type of shelving utilized throughout the records storage area (for outpatient and inpatient records).

The work area for maintenance of records is shown in Photograph C-5. Three people working at this table are very crowded. At times, up to eight people may be working on maintenance of records. This requires personnel to work in the aisles and interferes with other personnel retrieving records.
APPENDIX D

PHYSICAL LAYOUT OF MEDICAL RECORDS ADMINISTRATION BRANCH
Figure D-1. Layout of Medical Records Administration Branch
LEGEND FOR FIGURE D-1

1-19 Open shelf filing for inpatient records
20-35 Desks
36 File cabinet
37 Shelving
38 Filing for nominal index cards
39 Pillar
40 Shelving
41-42 Shelving
43 Shelving
APPENDIX E

REVISED LAYOUT OF OUTPATIENT RECORDS BRANCH
OUTPATIENT RECORDS REORGANIZATION

The following reorganization would take place in the outpatient records area if either Alternative 4a or 4b is determined to be the optimal feasible solution (refer to Figure C-1):

1. Move the row of shelving which separates inpatient and outpatient records sections (1-7), 5\(\frac{1}{2}\) feet (1 row of shelving) further into the inpatient records area.

2. Move shelf numbers 13, 14, 19, 20, 26, 27 into the area currently occupied by shelves numbers 1-7.

3. Remove desk and coffee table (42 and 43) and establish work area for maintenance of records in this area. Current work table (44) should be replaced by small desks or tables without drawers and a deep basket in the records maintenance area.

4. Move records storage shelves 16, 17, 18, 23, 24, 25, 28, 29, 30 against the wall leaving enough space for a person to walk between the records and the wall.

5. Place records sections 15 and 22 back-to-back at the end of row 16, 17, 18.

6. Place one new section of shelving at the end of row 23, 24, 25 and one new section at end of row 28, 29, 30. Instead of sending records to the warehouse across post in January, integrate records into the two new sections of shelving. (Records currently in warehouse would be retired to St. Louis in January.)

Revised layout of outpatient records is depicted in Figure E-1.
Figure E-1. Revised Layout Outpatient Records.
LEGEND FOR FIGURE E-1

1-36  Shelving for outpatient records
37-44 Desks for records maintenance
45   Storage locker
46   Personal effects locker
47   Shelving
48   Distribution boxes
49   Adressograph machine
50   Pillar
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