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This paper used a Multi-Variate Regression Analysis to analyze the Patient Appointment System (PAS) at Gen Leonard Wood Army Community Hospital, Fort Leonard Wood, Missouri. The model presents a construct of an appointment system which must satisfy both the demands of external and internal customers. At the same time, the hospital administrator must manage the system in a manner which efficiently uses a limited resource, the physician's time. The paper begins with background interviews, then descriptive statistics of visits and demographics, and finally proceeds to analyze the significance of variables which effect the appointment system. The Appointing and Scheduling Module of the Automated Quality of Care Evaluation and Support System (AQCESS), Manpower Expense Report System (MEPRS), and the MED 302 Medical Summary Report provided sufficiently detailed data for use in analysis. The results provide management with critical oversight indicators which can be used to monitor and evaluate the productivity of the system.

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AN EFFECTIVE OUTPATIENT APPOINTMENT SYSTEM FOR

GENERAL LEONARD WOOD ARMY COMMUNITY HOSPITAL

Based upon a Multi-Variate Regression Analysis of

Management Indicators

Fort Leonard Wood, Missouri

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

CPT Michael E. Hooten, MS

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ABSTRACT

This paper used a Multi-Variate Regression Analysis to analyze the Patient Appointment System (PAS) at General Leonard Wood Army Community Hospital, Fort Leonard Wood, Missouri. The model presents a construct of an appointment system which must satisfy both the demands of external (patients) and internal (physicians) customers. At the same time, the hospital administrator must manage the system in a manner that efficiently uses a limited resource, the physician's time. The paper begins with background interviews, then descriptive statistics of outpatient visits and clinic demographics, and finally proceeds to analyze the significance of variables which effect the appointment system. The Appointment and Scheduling Module of the Automated Quality of Care Evaluation and Support System (AQCESS), Manpower and Expense Report System (MEPRS), and the MED 302 Medical Summary Report provided sufficiently detailed reports for use in analysis. Thirty two variables were provided by the reports for the six following clinics; Internal Medicine, Pediatrics, General Outpatient, Family Practice, Gynecology, and Orthopedics. Predictor variables which may effect appointment availability are identified and their significance measured through Multi-Variate Regression Analysis. A full model considering multiple variables was reduced to a restricted model of significant predictors. The results provide management with critical oversight indicators which can be used to monitor and evaluate the productivity of the system.

I. INTRODUCTION

The military healthcare consumer is a unique individual entitled to medical benefits for himself and their families whether they are active or retired soldiers. Title 10 of the United States Code establishes treatment entitlements for the military beneficiary in any Military Treatment Facility (MTF). Our beneficiary is unique because there is no charge for service provided by the MTF. However, a queue quickly develops in this system of free care. Beneficiaries compete for limited appointments and because of this, the concern of our consumer is not the actual monetary cost of treatment, but the ability to gain access, an opportunity cost. The patients in the military system shifts their focus to waiting time from the date the appointment was made and the convenience of the appointment offered. Thus, access and appointment availability become key components of patient satisfaction within the military medical system. While the appointing system and method of scheduling patients may not appear crucial to a facility independent of accounts receivable, there is an inherent concern for improving the patient-physician encounter, and patient satisfaction within the system of care.

While access for the patient began with the hospital's appointing system. Management should realize that it has a responsibility to examine and evaluate the system, and if necessary, governing policies. In the spirit of continuous improvement and Total

Quality Management (TQM), management of General Leonard Wood Army
Community Hospital responded to the concern of its consumer population
with the initiation of this study and a systems analysis of the
Patient Appointment System.

General Leonard Wood Army Community Hospital

Located at Fort Leonard Wood, Missouri, General Leonard Wood
Army Community Hospital (GLWACH) has 153 operating acute care
beds providing a full range of medical services to greater than 1400
patients a day, the majority of which are outpatient. Outpatient
services are provided to active duty, family members, and retired
personnel in accordance with Federal Law Title 10 USC. During the
third quarter Fiscal Year 1989, outpatient clinic visits averaged
41,724 per month, with the breakdown as follows: 17,348 Active Duty,
11,389 Active Duty Dependents, and 7,797 Retired and their dependents
(Source: MEDDAC Review and Analysis, 3d Quarter FY 89). Patients
generally access the system by a phone-in appointment process,
however not all beneficiaries are accommodated by the system and a
common result is spillover into the Emergency Room and the General
Outpatient Clinic. This and other effects are discussed in greater
detail in the paper. Local and long distance phone lines afford the
opportunity for access to an eligible patient population that resides
throughout Southern Missouri, Northwest Arkansas, and Eastern
Oklahoma. While the Patient Appointment System (PAS: also known as

Central Appointments) schedules the majority of appointments with the use of an automated system known as the Automated Quality of Care Evaluation Support System (AQCESS), a few clinics are decentralized and manage their own appointment schedule. For example, Urology manages appointments through the use of a manual system, an appointment book. Surgery uses the AQCESS system to book its own appointments as patients call the clinic directly.

Conditions which Prompted the Study

The appointment system of any hospital serves as the central point of access for the patient. Thus, the appointment system can be seen by the patient as either facilitating access, or acting as a barrier to care. The Fort Leonard Wood Family Action Symposium held in April 1989 surfaced the issue of dissatisfaction with the availability of appointments. Dependents and retirees vented their frustration as Central Appointments became their primary target and received the blame for an inability to get appointments. Conversely, this presented a challenge as the hospital relied heavily upon this system. Effective physician utilization can be enhanced by a properly managed PAS. The physician views the system either as an effective mechanism in maximizing the limited time available with patients, or a managerial constraint that impedes his ability to properly run a service. Regardless of how the appointment system is perceived, a quality appointment system must satisfy both the patient and the

clinical staff, especially the physician. It must maximize the availability of physician time while minimizing the barriers to access for the patient.

Rising (1977, p.33) emphasizes the crucial importance of the appointment system as it is the first point of contact and patients can sense abruptness, casualness, or disorganization within the organization. Further, the appointment system and its effectiveness must be evaluated as it allocates the most important resource GLWACH has-the provider's time.

Beginnings of the Automated Appointment System

Discussion of the appointment system, whether to centralize or decentralize, began in 1982 when the facility first attempted to automate the appointment system. The Burroughs system arrived in 1985 and with it resurfaced the issue of centralization versus decentralization. The equipment, was a combination of a transfer from Dwight David Eisenhower Medical Center in Fort Stewart, Georgia and new purchases by Health Services Command (table 1) and was sufficient to institute either a centralized or combined appointing system. Details of the implementation are incomplete, but there was an initial attempt to have a combination decentralized/centralized concept. This system continued until an Inspector General visit in 1985 and a finding was rendered on the appointment system at Fort Leonard Wood. During this same time frame, the facility was asked to justify the Appointment scheduling system, decentralized or centralized to Health

Services Command, in conjunction with the installation of the
Burroughs system.

After a review of past ad hoc committee minutes and
handwritten notes between the command group, there appeared to be a
consensus that a centralized appointment system would address the
Inspector General findings, reduce time to appointment, and maximize
available resources. However, as clinical department chiefs changed,
the discussion resurfaced related to the most effective method to
appoint patients. An ad hoc committee on decentralization was formed
in 1987. They recommended that the hospital test decentralization in
two outpatient clinic sites, the OB/GYN and Allergy/Dermatology
clinics. Upon review, a patient satisfaction survey showed that
patients preferred a decentralized system. Since they could make a
call to the clinic for their appointment, patients felt a substantial
degree of convenience and perceived that more appointments were
available. Unfortunately, the new system was not adequately prepared
for implementation by hospital management and failed. The clinic
receptionists were not comfortable with appointment scheduling. A
major reason was the face-to-face contact with the patient when
telling them that an appointment was not available. There were in
fact a few documented incidents of irate patients. Additionally, the
medical clerks had other responsibilities besides appointing and were
not fully trained and dedicated appointment clerks. After

consideration, a decision was made to revert the OB/GYN clinic to
central appointments and Allergy/ Dermatology continued to operate in
a decentralized mode, but only for a short time.

At the present time, the facility operates with a combination
method of appointing patients with the Surgery/Urology Clinic being
the only clinics in a purely decentralized mode.

table 1. The Burroughs System
          Equipment from Dwight David Eisenhower
----
          14 MT985   Display/ Processors
          12 TP130   Keyboards
          16 AP1340   Auxiliary Line Printers
          16 XC003   25ft Data Set/Concatenation Cables
          12 CP1004   Synchronous 4800 BPS Modems

          Health Services Command Purchase

          2 MT985   Display/Processors
          4 TP130   Keyboards
          1 BI353   Multi-Line Controller
          5 BI651-2   Synch Data set up to 4800
----
source: GLWACH Decentralization Committee minutes, 1985

The Arrival of the Appointing and Scheduling Module (AQCESS)

Another contributing factor to this study was the installation
of the Appointing and Scheduling module of the Automated Quality of
Care Evaluation Support System (AQCESS). Central Appointments had
used the Burroughs System, but in 1989 received a new system and 30
terminals for use in Central Appointments and clinics throughout the
hospital. Training was provided to the staff of Central Appointments
by Mr. John Mulhern, Manager of Training, Implementation, and

Conference Services, National Data Corporation and Sergeant First
Class Allan MacKenzie, Army Defense Medical Information Systems. I
observed the training, received a briefing, then solicited comments
from the clinic medical clerks during routine rounds. The comments on
the training were most favorable, but medical clerks were still not
comfortable with their ability to book appointments using the clinic
terminal.

This combination of events resurfaced the issue of appointment
method. Generally, physicians preferred a decentralized system while
some administrators, clerks, and physicians wished to maintain the
centralized system. Additionally, it has been realized by hospital
management that it is no longer possible to separate the system as
purely centralized versus decentralized. This study hopes to assess
the appointing system and provide recommendations which can improve
productivity and accessibility.

Statement of the Problem

The intent of this study is to determine the most effective
method of managing the scheduling of appointments for the outpatient
clinics at General Leonard Wood Army Community Hospital, Fort Leonard
Wood, Missouri. Military hospitals generally encounter the complaint
of, 'not having enough appointments available for the number of
patients desiring an appointment,' and 'not being able to give
appointments within a timely manner.' Health Services Command has set

goals for time to appoint, and they are monitored at facilities
throughout the command. The ability to achieve these goals is
affected by underlying issues such as no-show appointments which could
be used by others if properly cancelled and scheduling clinic staff to
maximize clinic time. The appointment system can be a complex use of
a centralized versus a decentralized system and block scheduling
versus individual appointments. Further, its ability is enhanced
through the use of automation designed to support a scheduling system.
It is also heavily dependent upon the ability and training of those
who use it. Next, the availability of physicians, in the proper
specialties, is a major factor and cannot be overlooked. However,
physician availability will continue to be a problem within Health
Services Command and this hospital for years to come, especially in
primary care. Resolution of the problem as identified in this study
should allow for more efficient use of the available personnel
resources in the delivery of patient care services, thus improving
patient satisfaction.

Objectives

The objectives of this project will be to:

(1) Conduct a literature review to assess current and past studies on centralized and decentralized appointing systems.

(2) Collect the workload data on six clinics within GLWACH for the calendar year 1989.

(3) Determine if there are financial/funding limitations with any recommended changes to the current system.

(4) Conduct interviews with the administrators and physicians, who have oversight responsibility for the appointing system.

(5) Determine the variables which effect outpatient visits and to evaluate whether those identified are significant predictors?

(6) Determine whether appointments made are a significant predictor of the workload variable - clinic visits, then to determine what variables which can or should be monitored by the Patient Appointment System.

(7) Given the understanding that outpatient visits and the number of appointments offered are a result of numerous variables, determine if GLWACH management can use these indicators in their normal Utilization Review process.

(8) Reach conclusions and make recommendations.

Criteria

The applicable criteria for this research included the following:

(1) The study must not interfere with the normal delivery of patient care.

(2) The GLWACH staff must be willing to openly discuss the issue of the appointing system and accept the proposal concept.

(3) The clinics studied must provide a demographic mix which accurately reflects the eligible patient population.

Assumptions

The following assumptions were made:

(1) Staffing levels, of the clinics studied, would remain relatively constant for the twelve month period.

(2) The patient population, of the clinics studied, would remain relatively constant.

(3) The data collected by the various workload accounting reports for calendar year 1989 was considered to be reliable and valid.

Limitations

The study was constrained by the following factors:

(1) Patient care could not be interrupted by the research design.

(2) A cost benefit analysis would not be part of the study.

(3) Any recommendations must consider the current staffing constraints.

Literature Review

While appointment systems have been widely studied, they continue to be an issue - the "ideal system" eludes definition, precise quantification, and the subsequent ability to implement. The intent of the literature review is to obtain all the various elements that have been identified by previous research. It is widely recognized that appointment availability, patient satisfaction, and provider ,oductivity are major issues, but the scope was narrowed to focus upon potential variables which could be studied at GLWACH.

Callahan (1987, Summer, p.193) states an ideal scheduling system should: a) maximize the number of patients the staff sees in a specified period, b) minimize patient waiting time without impairing the entire system, and c) maximize the use of support staff and examining rooms. This study will address the goal of maximizing patients seen.

There are many ways to accomplish this. Block scheduling, modified block scheduling, and individual appointment scheduling are the three major scheduling systems currently used in medical settings and coordinated through a centralized, decentralized, or combination system.

Thus, the manager has the ability to control the patient's access to the system and to properly employ the available resources.

Results of Callahan's study show that patient waiting time can be reduced by manipulating environmental antecedents.

The appointment system is not purely a question of how many appointments to schedule in a given time period, but it is also one of which format is more efficient - the clinic staff or a central organizational source responsible for making appointments to all clinics.

Centralization versus Decentralization

Ross et al (1984) comments that the scheduling problem, as it is often called, is frequently an issue of complex interactions and uncertainties. These involve the patient, the clinic staff, and the most important player, the physician.

In a centralized system, there is greater opportunity for control by hospital/clinic management. This leads to greater uniformity in how appointments are handled and obviously better ability to monitor the entire process. Yet, centralization has a tendency to lead to greater impersonalization, and many providers dislike their lack of control and supervision of the system.

From the patient's perspective, a centralized appointment system allows the patient to use one contact to achieve multiple appointments with different providers and services, especially in a multi-specialty practice. On the other hand, there may be redundancy in a centralized system and a waste of resources that was never intended. The complexity and physical size of the operational area

may require that the function be performed behind the scenes, requiring patients to actually go through another receptionist at a clinic, to call later when they return home, or to use an internal telephone system to make appointments.

There is less administrative complexity involved in decentralized systems, fewer rules, and of course, less managerial oversight.

It is obviously not necessary to choose one of the two extremes. In many instances, modifications of either system or a combination of the two may be appropriate. For example, appointments may be centralized for a subgrouping of providers rather than an entire practice, leading to a series of mini-central.zed appointment systems. Thus, the manager has the option of examining and implementing one form or combinations, with the goal of effective physician utilization. The secondary results will be improved clinic operation and satisfied patients.

While most appointment systems are marketed as a means to satisfy patients, it must be remembered that the true purpose of the system is to process patients in an efficient manner. Rising (1977) provides further insight with his comments that from the point of view of the provider, the purpose of an appointment system is to supply a steady stream of patients so that the provider will not have to wait. From the point of view of the patient, the purpose of an appointment system is to secure access at a convenient time with as little waiting as possible. The objectives of high utilization on the part of

providers and low waiting time on the part of patients are the criteria used to judge the quality of an appointment system.

Rising offers two advantages with a central appointment system. Centralizing the appointment-making process in a single location with a specially trained staff can reduce costs and errors. Second, a centralized schedule can provide a vantage point to monitor the schedules of the providers and the flow of patients.

Centralization can reduce costs except in the special case where a department (or provider) insists on its own receptionist. This person is usually expected to be fully utilized and available (at no additional cost) to make appointments a good share of the time. In this case, receptionists/ secretaries, who book appointments as part of their regular job, can eliminate the cost of operating a scheduling department. Therefore, the job descriptions of clinic receptionists should be examined for redundancy in the organization, and not duplicate or usurp the effort of a central appointing department.

Further discussion and guidance on the appointment system is provided by the American Hospital Association (1986) which describes departmental profiles for outpatient clinics. The AHA states that 'The key to operational efficiency is patient flow. The first step toward establishing effective patient flow is the development of an effective patient scheduling system.'

The AHA details the comparison of the two systems in an attempt to assist the organization implementing a system which best

suits its health care environment. A variable that can effect patient flow is centralization or decentralization of the registration and appointment systems.

The advantages of centralization are:

* coordination of multiple examinations

* ease of location and retrieval of medical records

* better use of registration personnel

The advantages of decentralization are:

* patient deals directly with the clinic staff

* less confusion at registration

* quicker reaction to patient scheduling and arrival

Method of Appointing: Block versus Individual

It must be considered that despite the system implemented, the patient may still continue to face lines at the clinic. Compared to the individual appointment system, the block system is more provider oriented and is more commonly found in larger institutions, due to its ease of administration. It is the most efficient system for saving provider time (when relatively large numbers of patients are involved), and the longer the time blocks are, the more efficient it is in this regard. The purpose of the block appointment system is to create a queue so there will be no loss of provider utilization. If provider utilization is the goal, then long queues may be desired, but this of course inconveniences the patient.

Spendlove (February, 1987) comments that waiting for long periods in the physician's office is a frequent complaint of patients. It is also a major reason for subsequent failed appointments, and non-compliance with physician's orders. He further notes that amenities and the personality of the staff also play a key role in patient perception of treatment received and satisfaction with the office visit. This perception should alert the staff that personal interaction may be a greater variable than anticipated and should be considered in any study of patient satisfaction.

Conclusion of Literature Review

In conclusion, patient, clinic staff and physician productivity and satisfaction with the appointment system appears to be dependent upon several variables. The simple implementation of a system over another based upon the analysis of a single variable, as has been done in past studies (table 2) may not produce the desired results. That is, it may produce patient satisfaction with the number of appointments offered by a preferred physician. Patient satisfaction surveys are well intended, but the comments are not constructive and without any positive commentary. Therefore, the evidence suggests that numerous variables may have significant impact upon provider availability. With a focus upon systemic problems, the identification of these variables may be possible. All variables must be evaluated and compared to the system, or combination of systems, presently in place. Subsequently, they must be tested against

proposed systems which can be implemented in the GLWACH environment. Based upon past studies, the Patient Appointing System must consider all methods and select the one that is the most appropriate for the clinic staff and the type of patient population served.

TABLE 2 Literature Review

Source	TEST	Subjects	Variable/Character studied
Callahan, Redmon(1987)	Survey, Descriptive statistics	Patients	Patient waiting time
Spendlove (1987)	Survey	Patients	Patient satisfaction
Bopp (1989)	Flowchart	Patients	Ambulatory visit
Duncan (1988)	Queue analysis	Physicians	Total patient time, interval between patients
Rosenquist(1987)	Queue analysis	Patients	Patients in Radiology
Cawley (1987)	X2	Patients	Patient no-shows
Ross (1984)	Case Study	Appointing Systems	Method of Appointing
Rising (1977)	Linear Programming	Appointing Schedules	Method of Appointing

Purpose of the Study

W. Edwards Deming, a noted industrialist and proponent of
Total Quality Management (Walton, 1986), states that workers are
responsible for only 15 percent of an organization's problem. It is
the Patient Appointment System, which management designed and
employees are forced to use, that accounts for the other 85 percent.
The system is the responsibility of management and serves as an
operational example of a systems problem. With Deming's perspective
of management responsibility and a model of the appointment system
being responsive to external (patients) and internal (providers)
customers, it is the intent of this study to examine the effects of
clinic hours, inpatient admissions, Emergency Room consultations,
patient demographics, and resources upon the number of patients
processed through the appointment system.

The study will examine manipulated variables for the effect
upon the variable of interest within the construct of solving a system
problem, whereby the focus is on the mechanisms in place and not
individual employees.

Given the approach that our appointment system is the subject, the following variables are identified for study in the outpatient clinics:

* Appointments given by Central Appointments

* Walk-ins-patients seen but not appointed prior

* Clinic Visits-total visits seen in clinic each month

* Clinic Hours-physicians hours spent in the clinic

* Physician Assigned-number of physicians assigned to clinic

* Patient Cancellations-appointments cancelled by patients

* No Shows-appointments broken by patients

* Clinic Cancelled-apointments cancelled by the physician

* Inpatient Admissions-number of patients admitted by the physicians of that clinic

* Inpatient Hours-number of hours spent on the ward by physicians in each clinic

figure 1

The Population Studied

Active Duty   Military Physicians

Active Duty Dependents   CHAMPUS Partnership

Retired and their Dependents

------------+------------

:

Variables which Effect Appointments

:

Routine/Follow-up/Referral by Consult

:

 PATIENTS   ---------- _PATIENT_ ------------ PROVIDERS

cancellations   APPOINTMENT   number assigned

no shows   _SYSTEM   clinic hours

descriptive statistics centralized   inpatient hours

 of demographics   decentralized   ER referrals

                       block_   Walk-Ins taken

                       individual   appointments

                           :   Clinic Cancel

                           :

              Appointment in the Clinic

              (Satisfied Patient and

              Productive Physician)

II. METHODS AND PROCEDURES

The study used an objective analysis of the present patient appointment system and alternatives. Background information upon the present system will be gathered by interviews with the Deputy Commander for Clinical Services (DCCS), the Chief, Clinical Support Division, Chief, Department of Surgery, Chief, Department of Primary Care and Community Medicine, and a review of all governing regulations which influence the system.

After completing an extensive literature review, the study:

1) Compared the system at General Leonard Wood Army Community Hospital with that of other hospitals within the service area and observed the CHAMPUS Partnership program operating within the facility.

2) Compared and contrasted alternative methods of appointing.

3) Considered limitations imposed by resource constraints, and the capability to physically implement a recommended system.

4) Performed a quantitative analysis of the clinics and staff, combined with a qualitative analysis of the clinical staff and physicians.

5) Collected data on and observed the daily operation of the outpatient clinics, to include the decentralized clinics of Surgery and Urology.

6) Collected data on and observed the daily operation of the
Patient Appointment System and the Appointing and Scheduling Module
(AQCESS), MEPRS, and MED 302 Medical Summary Report.

7) Finally, reviewed the current method of referring
patients.

Preliminary investigations and an extensive literature review
revealed that there are numerous variables at play in the
GLWACH Patient Appointment System. With this, it was decided that all
variables were worthy of consideration. In the multi-variate
approach, variables were isolated for study and the methods for data
collection and analysis based upon previous studies (table 2) with
their univariate focus.

A recent unpublished study by Rufus S. Howe (1989), a Nurse
Practitioner, Internal Medicine Clinic, Keller Army Hospital, suggests
that patients can be prioritized, if the reason for referral and past
history are known. The appointment system can play an active role in
the efficient management of limited appointments and physician's time.
Prioritizing of consults can reduce the numbers of patients needing
dedicated appointments, for example block appointing prescription
refills or blood pressure checks.

The previously cited studies indicate that while an efficient
patient appointment system is desired, there is actually an
intermediate objective of effective use of provider time. Palmer et

al (1987, July, p.355) detailed Army plans for an automated appointment system which integrates with the Composite Health Care System ("CS), the information system of the future for Army hospitals, but comments "although a centralized system was more efficient and easily managed, patient satisfaction proved a higher priority". Thus, efficiency and effectiveness are mutually exclusive. It is the intent of this study to determine an effective system. This translates as an appointment system which facilitates improved provider utilization and patient access.

Data Analysis

Sufficient data was provided by the AQCESS Scheduling and Appointing module, Patient Administration Division's MED 302 Medical Summary Report, and the Resource Management Division's Manpower and Expense Reporting System (MEPRS) for cursory analysis. The ready availability of these reports was a distinct advantage and these are the same reports used in the Utilization Review process. Additionally, if another facility desires to replicate the study, the same data is available at any other U. S. Army facility using these reports. Descriptive statistics of the six clinic's population, appointments, and workload will provide the basis for initial comparison between individual clinics with inferential statistics focusing upon the identification of significant variables.

Preliminary data collection and analysis presented evidence that suggested that several variables influence the appointing

process, therefore, all variables must be considered in the presence
of each other and a Repeated Measures Regression Analysis should
provide indication of which variables are significant. The dependent
variable was recognized as a potential function of several independent
variables, or variables of interest. These are normally manipulated
variables, but due to patient concerns and the need to maintain
physician productivity, it was decided that workload data for calendar
year 1989 would be sufficient. These are satisfactory as variables of
interest as it was recognized that they are inherent variables of the
system, mentioned throughout various committee meetings within the
hospital as having an impact upon appointments and clinic visits.

Six clinics were selected because of the variation in their
specialty and the type of patient. Data for the calendar year 1989
was readily accessible and afforded the opportunity to trend data.

Variables

The dependent variable (Y1) is the number of appointments
given. Also, Clinic Visits (Y2) was used as a dependent variable.
The goal of the study was to determine which variables demonstrated
significance.

The independent variables (X) are

(X1)Walk-ins:patients seen but not appointed

(X2)Clinic Visits:total patients seen in that month

(X3)Clinic Hours:physician hours spent in the clinic

(X4)ER consults:responses to ER during the month

(X5)Physician assigned:number physicians assigned to clinic

(X6)Patient Cancellation:appointments cancelled by the patient

(X7)No Shows:appointments broken by the patient

(X8)Clinic Cancelled:appointments cancelled by the physician

(X9)Inpatient admissions:number of patients admitted to the

hospital by that service for the month

(X10)Inpatient hours:number of hours spent on the ward by that

service for the month

Additionally, variables representing the demographic background of the study population were inserted for control purposes. This was necessary since the specialty of the clinic attracts a particular segment of the patient population. As a result, a total of 32 independent variables were considered. In order to observe the effect of 32 variables upon a dependent variable, a Multi-Variate Regression Analysis was considered as the best approach to the identified problem.

The formula derived is a full regression model that allows stepwise regression to eliminate nonsignificant and/or redundant variables. Once a restricted model is formulated, variables of significance can be studied with greater detail.

Design

Emory (1985) comments that in the field environment, the researcher cannot control enough variables to perform a classic experimental design. This study parallels his comment as in a functioning hospital, the researcher was not at total liberty to set up a truly experimental design. Therefore, a quasi-experiment, with the data collected for calendar year 1989, was used in a repeated measures design. Data was readily available in the form of historical records and the treatment groups served as their own controls. The R squared (coefficient of determination) followed by F-ratio should provide the significance of the overall regression model followed by significance of the independent variables, shared variances, and their contribution to the equation.

The Full Model Equation demonstrates the Hypothesis that the Patient Appointment System is dependent upon several predictor variables. Further, this model serves as the null hypothesis since any significance will be revealed in the restricted model.

HO $\quad Y = A_0U + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \ldots + b_{32}X_{32}$

The following equation was used to test the significance of each predictor variable in the Restricted Model against the Full Model. This model served as the alternate hypothesis. The independent variables and their statistical significance support the

construct that appointments and clinic visits are dependent upon
certain variables which can be influenced.

$$F = \frac{(R2\underline{f} - R2\underline{r})/ (NLIPV\underline{f} - NLIPV\underline{r})}{(1 - R2\underline{f}) / (N - NLIPV\underline{f})}$$

A repeated measures design regression model initially
considered the effects of 32 independent predictor variables (X1-X32)
upon the dependent variable (Y) clinic visits, then followed to
consider which variables effected appointments given. As described by
Pedhazur (1977), the repeated measures design can provide efficient
analysis of the data collected for a twelve month time period through
the workload reporting mechanisms presently in place throughout the
hospital. Some of the advantages of this design are that it affords
the opportunity to control for individual differences among the
subjects. In the repeated measures design, each subject is its own
control. Also, it is a more economical than a randomized design as
the researcher can use readily available data and not construct an
experimental environment within the facility. Finally, one can
observe the effects of the study across time and is not limited to a
specific pre and post comparison.

The disadvantages are threats to internal and external
validity. Potential problems can be inaccurate or incomplete

collection of data, statistical regression, and selection bias.
Validity was verified by the F-ratio with the assumption of a normally
and independently distributed population, homogeneity of variance, and
randomness. These concerns were addressed within the study.

Validity

Threats to validity are potential in a design where treatment
groups serve as their own controls. However, the risk will be reduced
with the regression model and the ability to control for and hold
constant the effects of competing variables. The multi-variate
analysis increases validity and reduces the threat of multi-
collinearity and effect modifiers. Further, since the data collected
is input from a variety of sources within the hospital and forms the
basis for our management reports, the risk was reduced that the data
came from a single potentially biased source. The AQCESS system
provides several reports which can be compared and contrasted with
each variable. Additionally, the same numbers were compared between
the various reports on MED 302, Patient Appointment Supervisors
Report, and MEPRS. Once again, multi-variate analysis reduces the
threat to validity with its numerous controls.

Reliability

A major concern of reliability may be the data collected but
that risk is reduced as most of the data is the result of input into
an automated system from a variety of sources. There is concern that

the data may not be properly input, but the risk was reduced by the ability to compare various reports provided by the AQCESS system against those reported by MEPRS, MED 302, and the Patient Appointment System supervisor. It must be noted that these are the same reports submitted to Health Services Command and which provide part of the basis for our reimbursements. The final equation, properly constructed and a majority of the variance accounted for, had a significant R value indicative of reliability.

Ethical Considerations

This experimental design was chosen because it used retrospective and current data over a twelve month time period. It was readily available and eliminated the need to set up a true experiment which affects real patients and clinic staff. There was no attempt to alter the clinic scenario or interrupt patient care.

III. RESULTS

Hospital Administrators have a great responsibility placed upon them and management of the appointment system is a primary example. Administrators must be able to describe, explain, predict, and hopefully control the system (Finsteun, 11 July 1988) in an attempt to improve efficiency and productivity. After a background investigation and discussion with several staff members who were intimately involved with the Patient Appointment System, descriptive and inferential statistics were used to focus upon the system. Through description and explanation of the variables, there is a greater opportunity to predict and control.

Compare and Contrast of PAS with other facilities

Various systems were compared during the course of the study and by the Decentralization Committee in 1985. The Chief, Clinical Support Division (at that time) called several Army facilities to ask how they ran their appointing system and prepared recommendations to the commander. I interviewed physicians, medical clerks, and nursing staff during the fall of 1989 and the general consensus was that there would never be a good appointment system and that patients would never be able to get all the appointments they demanded. The staff had worked with numerous systems and variations of centralized and decentralized. However, the overall consensus was that a centralized

system may not be desirable, but is a more efficient use of limited resources.

Discussions with Colonel George Sampson, Deputy Commander for Clinical Services and Major Ray Dalton, Chief, Clinical Support Division were held throughout the duration of the study. Health Services Command Regulation 40-5 and Health Services Command Pamphlet 40-7-1 establish that these positions have oversight responsibility for the Patient Appointment System. They both felt that appointments can be most efficiently handled through a centralized system. The major reason supporting their position being limited resources. They both understood that patients desired a decentralized system. This was due to the perception by patients that a direct call to the clinic would result in more appointments being available. Unfortunately, the committee minutes which documented past trials, did not support this.

Further, discussion revealed that appointments can be a problem regardless of the system in place. The Patient Appointment System manager, Ms. Evelyn Gray, in the Clinical Support Division eludes to the concept that many variables are at play and effect the availability of appointments. The ability to manage appointments becomes a time management issue and not one of centralization/ decentralization. The physician's time is a limited and critical resource to the hospital and must be properly managed in the effort to enhance utilization.

Methods_of_Appointing

GLWACH provided an opportunity to compare methods of appointing as the AQCESS report revealed that assigned doctors used individual appointing and the partnership physicians used a modified block method. Of course, the difference between the two is that the CHAMPUS partner's goal is to see as many patients in three hours as possible, while the military physician saw whoever was appointed by way of an individual appointment following standard templates.

All clinics under study made initial appointments through the Patient Appointment System (Central Appointments), but physicians were able to block schedules for follow-up appointments, MOD/SOD call, operating room time, and administrative time through the use of the template provided to the Patient Appointment Supervisor. Thus, it was noted that the centralized system was also blended with a touch of decentralization. This facility does not use a totally centralized system. Physicians retain portions of their schedules to use as the department chief felt appropriate.

The individual clinic can adjust templates in response to consumer demand or for special clinics. However, the physician is in control of this and must have the desire to increase appointments and/or clinic hours.

Resource_Impacts_Organization_and_Staffing_of_the_Clinics_under_Study

The appointing system of any facility may be greatly influenced by the availability of clinic resources. This includes not only the physicians, but the ancillary staff, diagnostic services, and treatment space. It should be noted that staffing does fluctuate throughout the year, mainly because of the military personnel system. The clinics under study did allow for comparison of resources and all appear to be fairly equal, despite the specialty. Family Practice does stand out as being staffed with more personnel, which is interesting as this clinic was designed to be a free standing clinic.

The Internal Medicine Clinic has 4 physicians assigned. The ancillary support staff consists of 1 Licensed Practical Nurse, 5 Nursing Assistants, and 2 clerks.

The Pediatric Clinic has 3 physicians assigned. The ancillary support staff consists of 4 Nursing Assistants and 1 clerk.

The General Outpatient Clinic has 4 physicians assigned. The ancillary support staff has 6 Nursing Assistants and 2 clerks.

The Family Practice Clinic has 5 physicians assigned. The ancillary support staff consists of 1 Registered Nurse, 2 LPNs, 4 Nursing Assistants, and 4 clerks. This clinic provided interesting observation throughout the year as it is the only clinic organized by the Tables of Distribution and Allowances (TDA) to be decentralized. Its staffing and the Family Practice concept was based upon

decentralizing. The clinic has been in the process of decentralizing for six months and the obstacles encountered were mainly due to the inability to gain equipment or phone lines in a timely manner.

The Gynecology Clinic has 4 physicians assigned. The ancillary support staff consists of 6 nursing personnel and 2 clerks. It had decentralized at one time but is now on central appointments.

The Orthopedic Clinic has 3 physicians assigned. The ancillary support staff consists of 3 Orthopedic Techs and 2 clerks.

table 3
Staffing_Comparison_based_upon_monthly_averages_CY_89

Clinic	FTEs	FTE/Physician
Internal Med	8	2
Pediatrics	5	1.66
General Outpatient	8	2
Family Practice	11	2.2
Gynecology	8	2
Orthopedics	5	1.66

source: GLWACH Tables of Distribution and Allowances 1989

This comparison demonstrated that all clinics are relatively equal in staff. However, this comparison should be evaluated against an external health care firm as this would provide a better perspective on our manpower staffing models. The Health Services Command Inspector General did this and what is interesting is that Kaiser-Permanente staffs an average of 3.4 FTE per physician (HSC Inspector General's report of October 1989). It appears that a potential underlying problem may be inadequate support for our physician's which may impact appointments and clinic visits.

Cursory observation of the descriptive statistics brings attention to the point that trends could be established in clinic visits and appointments. Therefore, while trends may be used to establish workload targets, it may better serve as a monitoring level and performance indicator. However, we should further analyze what variables may impact these levels should clinic productivity fall below expected levels. Low productivity may be due to known variables, or just simply low production on the part of the staff.

table 4

Descriptive Statistics of Clinics Studied
(Calendar Year 1989-monthly averages)

Clinic	Internal Med	Ped	GOC	Fam Prac	GYN	Ortho
Clinic Visits	1025.08:	1134.83:	1594.58:	1744.66:	712.25:	547.33
Appointments	346.33:	776.58:	689.33:	1088.92:	418.83:	267.08
Walking	679.42:	418.27:	821.92:	727.00:	293.42:	307.27
Clinic Hours	515.75:	386.16:	540.17:	637.58:	207.00:	261.83
Admissions	84.33:	27.16:	114.25:	43.66:	118.42:	70.08
Ward Hours	325.00:	92.16:	103.91:	103.42:	291.58:	201.42
No Shows	2.75:	12.75:	5.08:	17.08:	24.08:	16.66
Clinic Cancel	6.66:	2.00:	0.00:	13.00:	2.00:	12.75
Patient Cancel	18.33:	28.16:	20.08:	52.08:	13.75:	15.25
ER Consults	8.63:	2.00:	0.00:	3.33:	1.75:	1.91
Physician Assigned	3.83:	3.83:	3.83:	4.41:	4.00:	2.50
Active Duty	151.00:	0.00:	1123.66:	126.08:	149.58:	387.50
AD/Dependent	98.36:	1207.66:	475.83:	1315.00:	537.92:	146.66
Retired	589.45:	0.00:	297.00:	232.00:	1.91:	99.58
Ret/Dependent	627.82:	75.25:	413.75:	176.58:	201.58:	135.33

source: weekly PAS supervisor's report, monthly MEPRS, and monthly MED302. Note: when added, the number of patients do not match other numbers because not all arrivals count as visit/ workload.

The table represents the difference in clinic workload and patient demographics. These clinics were selected because they

represented a wide variation in primary and speciality care, and in active, dependent, and retired patients.

The correlation matrix allows comparison of dependent and independent variables. The coefficient of determination r provides a proportion of variance and that some relationship exists between the variables studied. However, it is not a test of significance.

While the correlation matrix indicates that certain variables are strongly related, this does not satisfy the study. Variables which are to be used by management as indicators must be determined through a stepwise regression analysis. This shall allow for the identification of predictors and their statistical significance.

table 5
Correlation Matrix: Strength of Relationship of Variables to Visits
and Appointments

	Clinic Visits		Appointments	
Appointments	.78272	**		
Walk-Ins	.65081	**	.10676	ns
Clinic Hours	.86101	**	.63661	**
Admissions	-.22037	ns	-.37839	**
Ward Hours	-.52883	**	-.49699	**
No-Shows	-.19861	ns	.19863	ns
Clinic Cancel	-.05042	ns	-.06247	ns
Patient Cancel	.66563	**	.79810	**
ER Consults	-.00005	ns	-.11838	ns
Physician Assigned	.47136	**	.56508	**

n=68, critical value 0.23848, p < 0.05 **

The Full Model Multi-Variate Regression Analysis was based upon a model consisting of variables noted in past univariate studies. That is as the null hypothesis, clinic visits and our workload

statistics are not dependent upon and a function of several variables. The alternate hypothesis would suggest that clinic visits are dependent upon and a function of several variables.

table 6

Results_of_Full_Model_Multi-Variate_Regression_Analysis

$$Y = A_0U + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \ldots + b_{32}X_{32}$$

	F(26,41)		R2		Prob	
clinic visits:	63.016	:	.9756	:	0.000E+	:

Clinic visits were analyzed as a function of 32 dependent variables. In order to identify significant variables, a stepwise regression analysis using Microstat 4.0 allowed for a comparison of the values of all variables. The evidence suggests that appointments offered is indeed a significant predictor of clinic visits. It should be noted that other variables, such as no-shows and patient cancellations were not significant.

The variables of appointments and clinic hours fall out as significant. This observation is also important as these variables are monitored by the Utilization Review Committee, which is chaired by the Deputy Commander for Clinical Services and attended by the Chief,

Clinical Support Division. The analysis reinforces that these are

potentially key productivity indicators and may be worthy of closer

monitoring.

table 7
Results_of_stepwise_regression_to_construct_a_Restricted_Model_
Multi-Variate_Regression_Analysis
Dependent Variable: Clinic Visits
Predictor Variable   T(DF 69) Prob   r2   r
Appointments   : 5.210 : 0.00000 : 0.5357 : 0.7319

ANOVA table
Source   Sum of Squares   DF   Mean Square   F   Prob
Regression   8677079.0357   1   8677079.0357 79.607 4.5 e-13
Residual   7520906.4573   69   108998.6443
Total   16197985.4930   70

Dependent Variable: Appointments
Predictor Variable   T(DF69)   Prob   r2   r
Clinic Hours   : 6.124 : 0.00000 : 0.3522 : 0.5934

ANOVA table
Source   Sum of Squares   DF   Mean Square   F   Prob
Regression   3369318.3365   1   3369318.3365 37.507 4.92 e-08
Residual   6198348.9875   69   89381.1447
Total   9567667.3239   70

IV. DISCUSSION

This study began as an analysis of the method of appointing patients and the system which is most effective, a centralized system versus decentralized, individual appointments versus block appointments. However, what the study revealed was that the number of available appointments was not dependent upon a single variable. Management must realize that there are a number of variables at play with some of statistical significance. All variables must be considered in the presence of the others and weighed for their impact upon the system. We must also consider that on the physician side, the appointment system can be viewed as a method of control by management and an attempt to control their clinical decisions. Management can establish guidelines on how much time to spend in the clinic versus that on the ward. However, this forces the hospital to must make a business decision. Physicians can be made to be in the clinic and see a greater number of patients, but at the expense of their inpatients. Presently it is to our advantage, under the MCCU reimbursement system, to concentrate their workload strategy upon inpatients and admissions. Military hospitals are still working under a system where the greatest reward lies in admissions and keeping the patient an extra day in the hospital. It may be difficult to increase the number of appointments or outpatient visits, unless management can demonstrate that visits result in a greater number of admissions. It

may appear that this is logical, but if our clinic visits are mostly prescription refills or annual checkups, it would not increase admissions.

Overall, this study has presented a concept that the issue of the appointment system can not focus on simply a 'matter of taste.' That is, it would be improper to select an appointing system based upon likes and dislikes of the administration, which may be due to past experiences and not founded upon solid research. Investigation of the problem has surfaced other issues which accompany the problem of effectiveness and efficiency.

Ancillary_Support

It was realized with the analysis that our organization is set up to maximize available resources which are usually limited. That is to use a central system of appointments and thus reduce the need for more clerks in each separate clinic. Presently, the hospital is authorized (budgeted) 1 FTE for 2,000 phone calls per month received in Central Appointments. This compares to a recommended civilian standard (Rising, 1977) that a receptionist could handle 1,200-1,500 phone calls per month. The military system is not designed to provide more support for the physician but rather to lessen the need for ancillary support by pooling resources. This study did not consider the impact of staffing difference, as most clinics are staffed proportionately as seen in table 3. The observation that Family Practice was staffed with more FTEs per physician allows for the

construct that staffing could impact clinic efficiency. These observations may warrant further study as already noted in the Health Services Command Inspector General report of 1989.

Equipment

It was further realized that you cannot define certain variables. For example, you cannot quantify the ability to get the equipment required to support a decentralized appointment system. It is one thing to say that the facility will decentralize the appointment system, but another to actually accomplish it. This scenario occurred with the Gynecology Clinic in 1988. The clinic attempted to handle its own appointments, but the sheer numbers of patients overwhelmed a single clerk, as she attempted to make appointments for all types of patients. She was expected to make new appointments and follow-ups, but there were neither dedicated phone lines for an appointing system, nor adequate automation support. Conversely, the Family Practice was authorized and given the equipment and the personnel necessary to decentralize, and has been prepared to decentralize in 1990, only to be held up by the unavailability of phone lines. Therefore, before management can say one system is better than another, the ability to provide the ancillary, administrative, and logistical support should be examined prior to implementation.

What Effects Appointments?

The main advantage to this study was that it surfaced the issue to administration that several variables affect appointments. While not all could be quantified sufficiently for study, it was possible to isolate a few from the various reports. The past studies cited took a rather superficial view that if you can get the no shows to call in and cancel, you could rebook those appointments and have more appointments to go around for everyone. However, these studies failed to acknowledge that the numbers of available physicians, clinic hours, or the number of inpatient admissions were also factors. Another common misconception was that the retiree population received the lion's share of appointments. Analysis of the demographics revealed that active duty and their dependents received the most appointments, at least in this facility. However, closer analysis of the active duty appointments can be directly attributed to the initial entry trainee population stationed here for basic training.

The Comparison of Decentralized to Centralized

As the analysis of the system continued throughout the year, the general conception by the patients questioned was, if they could just call the clinic directly, they could get an appointment faster. The physicians felt that having to turn in schedules to central appointments six weeks in advance, and to continually update their template was an extreme of management control. They felt they could do a better job if they were in control. These observations support

the perception that decentralized should be better. However, GLWACH
has two clinics which presently handle their own appointments and
currently they are unable to justify their physician staffing levels
under the present manpower staffing standards. The next available
appointment can be seen usually the next day. However, as specialty
clinics, their primary source of workload is a referral. If they were
primary care clinics, with large numbers of patients seeking access,
then the situation might be unmanageable.

Consults

Three of the clinics examined do see a lot of referrals.
The departmental policies were reviewed, as the variables were
analyzed, and it was noticed that the referral procedure varied
between clinics. Internal Medicine clinic, which has a large backlog,
does not require prior contact for making a routine appointment.
If the patient has a non-emergent condition, they are given a consult
by the referring physician, and instructed to call central
appointments. This results in the patient being placed on a waiting
list. Eventually, the backlog is reviewed by the Internal Medicine
service and patients appointed. Conversely, the Urology Service
requires prior contact and uses this method to restrict access to
those who are deemed to require Urological intervention. Thus, the
number of patients competing for appointments may be reduced or
increased based upon the method of accepting referral.

Summary

Given the budgetary constraints of the present environment, a review of the appointing system was necessary for General Leonard Wood Army Community Hospital. An effective appointment system has to be an efficient process and minimize wasted provider time. With proper application, the increased utilization should result in an increase of ambulatory visits, MCCUs (or Ambulatory Work Units/AWUs), and an indirect result may also be increased admissions. Any improvement in the system should be viewed as a benefit with a potential for a greater return on investment to the facility by increasing our workload through enhanced productivity and increased accessibility.

Departures from the Graduate Management Project Proposal

The variables in this study differed from those in the original proposal. It was realized that the selection of variables should be derived from the same reports the administration must use in normal operations. A queuing study and survey of patient and staff attitudes would have been of interest, but the results were not in a practical format for the hospital administration of General Leonard Army Community Hospital. It was decided that the GMP could present better recommendations if the study was based upon the analysis of actual reports for calendar year 1989.

V.CONCLUSIONS

The availability of appointments depends upon numerous variables. To make the assumption that the problem of productivity and availablity of appointments is due to a single variable is naive. Demographics of the clinic population must also be considered along with inpatient admissions. However, a common theme seen in all clinics, is that appointment availability is a matter of time management by the physician. Time for appointments must be budgeted and planned for by each service, then allotted to the Patient Appointing System supervisor. It is true that different factors effect appointments and that was the intent of this study, to identify such variables. However, each clinic has established its own standard on the appropriate number of appointments. That number could be based upon past trending of appointments offered by provider and/ or clinic over an established time period. This baseline would provide the department chief/ administrator the necessary target for appointments.

Further, it should be understood that a baseline was established with the knowledge that there are several variables which might impact upon appointments. When the appointment or clinic visits decrease, those specific variables should be examined by the department chief. Low productivity can be due either to certain known variables or a matter of poor time management on the part of the clinic.

RECOMMENDATIONS

GLWACH would best serve the patient population by maintaining the centralized method of appointing. However, greater oversight is needed by the Chief, Clinical Support Division and the Deputy Commander for Clinical Services. This can be accomplished at the monthly Utilization Review Committee meeting and through an annual evaluation of physician appointing templates. The variables which merit the greatest consideration are the number of appointments offered per month and the visits per hour for each physician.

It must be noted that the Chief, Clinical Support Division has implemented a new patient appointment report which trends appointments over a three month period. While this has improved the capability to monitor clinic appointments, physicians must increase the number of appointments controlled by the Patient Appointment System or justify why they must continue to retain control. The present time schedule is inadequate for this purpose. The sample time schedule in HSC Pamphlet 40-7-1 would provide better accountability.

Also, departmental chiefs should be held accountable for workload targets. Under the current utilization review process, visits per service are reviewed on a quarterly basis. At two civilian health facilities, a discussion with the Chief Financial Officers disclosed that the productivity of each department is reported every two weeks and directors are held strictly accountable for their workload (Hoover, 14 December 1989 & Dupper, 7 June 1990). Granted

these are facilities where the profit margins are of daily concern, but our department chiefs must be just as attentive to their workload. Failure to be productive may not affect a profit margin, but it does imperil the supply dollars received in the annual budget. The argument may be presented that the quality of care may be compromised by the appointing of a greater number of patients. The Utilization Review Committee is designed to positively effect resource allocation. While it is process oriented and concentrates upon the cost effectiveness of medical practice and its efficiency (Ottensmeyer & Key, August 1988), it is not intended to reduce quality at the expense of the patient.

A better argument is that given the current level of resources and the administrative tasks required of them, physicians have found it difficult to meet the targets set by Health Services Command. While it is not within the scope of this graduate management proposal or this hospital, the evidence suggests that the number of FTEs per physician warrants further study. Physicians require more ancillary support if they are expected to manage any increase in outpatient visits.

Finally, the military system continues to work with a reimbursement system, the Medical Care Composite Unit, which rewards inpatient days and increased hospitalization. Perhaps when the services are finally under a DRG system, with adequate reimbursement for outpatient visits. We will see an increase in the number of appointments.

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Definitions

Appointment-A patient visit scheduled through the Patient Appointing
    System.

Cancellation-The proper cancelling of an appointment, which requires
    the patient to contact the appointing system.

Clinic Visit-A patient encounter in the clinic which requires
    physician consultation and an entry in the medical record.

Diagnosis Related Groups (DRG)- A weighted figure which is based
    upon patient acuity. It is used by Medicare to reimburse
    civilian hospitals.

Full Time Equivalent (FTE)- The budgeted amount on the payroll, or
    authorization, to employ one full time worker.

Manpower Expense and Reporting System (MEPRS)- The workload
    accounting system used in the Army hospital and monitored by
    Resource management Division.

Medical Care Composite Unit (MCCU)- The workload unit for clinic
    visits and the unit which the budget is based.

No-Show- The patient does not show for an appointment and fails to
    notify the clinic.

Tables of Distribution and Allowances (TDA)- The authorizing document
    which denotes the type and number of FTEs budgeted per
    department.

Walk-In-The patient presents at the clinic for treatment without
    prior coordination.

DEPARTMENT OF THE ARMY
Headquarters, United States Army Medical Department Activity
Fort Leonard Wood, Missouri 65473-5700

USA MEDDAC Regulation
No. 40-41   21 March 1986

Medical Services
PATIENT APPOINTMENT SYSTEM

1. PURPOSE.

    a. The purpose of this regulation is to establish procedures, define
responsibilities, and prescribe methods of scheduling patients, in outpatient
clinics at General Leonard Wood Army Community Hospital, on an appointment
basis.

    b. The provisions of this regulation are applicable to the following
clinics serviced by Patient Appointments System (PAS): Airborne Sickle Cell,
Allergy, Audiology, Dermatology, ENT, General Outpatient Clinic, OB/PAP,
Medical, Ophthalmology, Optometry, Orthopedics, Pediatric, Physical Examination,
Podiatry, Surgical, Urology, Well Baby, Body Fat Evaluation, Nutrition, PFB,
and Speech.

2. RESPONSIBILITIES.

    a. The Chief, Ambulatory Care Support Branch, Clinical Support Division
will be responsible for:

        (1) Organization, implementation and operation of the Patient Appointment
System.

        (2) Providing direct supervision, guidance, and support to the
supervisor, PAS.

        (3) Maintaining liaison with the chiefs of participating departments
and individual clinics as a means of managing and evaluating PAS.

        (4) Insuring that chiefs of all departments and clinics carry out
responsibilities to the PAS.

    b. Clinic Chief will:

        (1) Submit through the DCCS to PAS a written initial clinic protocol
for the PAS to follow (Encl 1 and 2). Any changes to this protocol will also
be forwarded through the DCCS for approval prior to implementation. Protocols
will be reviewed at least annually. Protocols will include:

        (a) Guidance for scheduling appointment by the PAS

This regulation supersedes USA MEDDAC Reg 40-41, 8 March 1985.

A-1

3. PROCEDURES:

    a. General:

        (1) PAS is a separate section organized under the Ambulatory Care Support Branch, Clinical Support Division. The primary functions of PAS are to provide medical appointment service for eligible beneficiaries and to facilitate patient treatment in the various clinics by reducing waiting time. Active duty military will have priority for routine, nonemergency appointments.

        (2) Hours of Operation: The Patient Appointment System operates Monday through Friday, excluding holidays. Telephonic requests for appointments will be accepted from 0730-0900 for same day pediatric and general outpatient clinic acute minor illness appointments only; from 0900-1600 for all other appointments. Written requests will be answered from 1600 to 1630 daily. Patients are not allowed to walk in to the PAS Section.

        (3) Cancellations:

        (a) Patient initiated cancellations will be filled on a first call, first served basis until the time of that appointment unless otherwise directed by clinic.

        (b) Health Care Provider initiated: PAS will notify patients of cancellation and reappointment time and date. When requested, clinic receptionist will assist PAS in contacting patients to cancel and reschedule appointments. (Reappointment of Department of Surgery patients who require rescheduling due to emergency surgery or unexpected problems in the operating room may be approved by Chief, Department of Surgery.)

    b. Specific:

        (1) Appointments for clinics can be scheduled through PAS by one of the following methods:

        (a) Direct telephone request by the patient.

        (b) Direct telephone request by the attending physician.

        (c) Direct telephone or written request from the patient's military unit.

        (d) Direct telephone request from clinic receptionist/secretary.

        (e) Written request by the patient.

        (2) Appointments for participating clinics will be processed by PAS clerks according to instructions submitted in writing by the chiefs of the respective clinics. Clinic protocols submitted by the clinic chiefs will provide guidance to appointment clerks in the PAS. Relevant appointment information will be provided to the patient by PAS.

A-3

4. References:

   a. HSC Reg 40-5

   b. HSC Pam 40-7-1

The proponent agency of this publication is the Clinical Support
Division. Users are invited to send comments and suggested im-
provements on DA Form 2028 (recommended Changes to Publications
and Blank Forms) directly to the Clinical Support Division, ATTN:
HSXP-CS, Fort Leonard Wood, MO 65473-5700.

FOR THE COMMANDER:

4 Encls   MICHAEL B. STEARNS
                                  MAJ, MSC
                                  Information Management Officer

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10 Hosp Pubs
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HSXP-SG-GR   1 October 1984

STANDARD OPERATING PROCEDURES
Scheduled Appointments for the Orthopaedic Service

1. PURPOSE. The purpose of this SOP is to establish procedures and define responsibilities in regard to scheduling patients for orthopaedic appointments.

2. GENERAL. The Orthopaedic Surgery Service consists of a Specialty Service and therefore appointments will be by referral only.

3. PROCEDURES. Appointments for the Orthopaedic Clinic can be scheduled through Central Appointment System by one of the following methods.

   a. Direct telephone request by the patient, if the patient has been previously seen or if the patient has been referred from another Health Care Provider on consultation sheet DA form 513.

   b. Direct telephone request by the Orthopaedic attending physician.

   c. Direct telephone request from clinic receptionist or secretary.

   d. Written request by the patient if the request is for a follow-up visit or if the patient is referred by another Health Care Provider.

4. SPECIFICS. The following general guidelines should be used for the scheduling of Orthopaedic appointments.

   a. Orthopaedic Clinic will conduct scheduled appointments from 0800 to 1130 hours and 1300 to 1530 hours.

   b. The attending Orthopaedic staff will see return appointments on an every fifteen minute basis and new patients on an every twenty minute basis. Thirty minutes should be allowed for new patients with back problems and forty-five minutes should be allowed for TDRL evaluations.

   c. The Orthopaedic OJT's schedule will change as his experience increases therefore, no specific time frame will be set down in this SOP in that regard. The monthly schedule, which is submitted by Assistant Chief or Chief, Orthopaedic Surgery should be used for guidelines in that regard.

   d. It is preferable that the on-call or second call days will be used for only return appointments. If these clinic hours are not completely filled with return appointments by two weeks prior to clinic date, then new patients may be scheduled in those open slots.

CLINIC: _Ortho_

DR: _Jackson_

Jul 5 Feb 85 APPOINTMENT TIME

PATIENT INFORMATION

UNIT OR PHONE	RANK	AGE	NAME AND SSAN		
				07	45
				08	00
					15
					30
					45
				09	00
					15
					30
					45
				10	00
					15
					30
					45
				11	00
774-2300	PA	37 0209 21	DOE JOHN. 000-20-1435	13	X
A 3-4 B-8626	AA E7	50-1027 R	YALE NATALEE 047-47-4631		X
					30
					45
				14	00
					15
					30
					45
				15	00
					15
					30

A-9

ENCL 2

SECTION IV
GENERAL INFORMATION

PATIENT APPOINTMENT SYSTEM

The telephone number for the Patient Appointment System is 329-2300. There are also two lines for long distance callers only - 314-368-9701. If you receive a busy signal, all lines are tied up. You should hang up and dial again. The Patient Appointment System makes only same day acute minor illness appointments for Pediatric, Family Practice, Evening Clinic, and General Outpatient Clinic from 0730-0900 daily. After 0900, appointments for specialty clinics and followup appointments for Evening Clinic can be made until 1600 hours Monday - Thursday and until 1500 hours on Friday. See page 24 for opening days of Specialty Clinic appointments. The Patient Appointment System is closed on weekends and holidays. To cancel an appointment that was booked through the Patient Appointment System, please call 314-368-9707 from 0730-1600, Monday - Thursday and 0730-1500 on Friday. This number is only for cancelling appointments.

WHAT TO WEAR WHEN VISITING

When visiting patients or attending clinics under other than emergency circumstances, all visitors to GLWACH are expected to dress in good taste. This excludes attire appropriate only to the beach, such as bare midriffs, short shorts, bare feet hair in curlers, and other attire which is inappropriate to the occasion and which detracts from the professional atmosphere which the hospital needs.

REPORTING CHILD ABUSE AND NEGLECT

Missouri and federal laws require that any suspicion of child abuse and/or neglect be reported immediately for investigation. This includes the reporting of young children being left unsupervised by their parents for an extended period of time. Please note that the law protects those who make such reports from subsequent liability.

When abuse or negligence is suspected, it can be reported to one of the following agencies:

   During Business Hours: Social Work Service - 368-9531, Missouri Hotline Number 1-800-392-3738, or the Abuse Hotline - 368-9293.

SECTION II
CLINIC SCHEDULES/APPOINTMENT INFORMATION

Clinic	Phone Number	Days Of Operation	Hours	Consult Necessary Before Appt Can Be Made(*p 15)	Appts Made By
Allergy	368-9391	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Audiology	9591	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Dental (Hospital)	1101	Mon-Fri	0730-1130 1230-1630	No "	Dental Clinic
Dermatology	9391	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Emergency Room	9741	Mon-Sun	24 Hours	No	N/A
Family Practice	9201	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Flight Exam	9130	Mon-Fri	0730-1130 1230-1630	No "	Flight Exam
General Outpatient Clinic	9481	Mon-Fri	0730 1130 1230-1600	No "	PAS "
Immunization	9391	Mon-Fri	0730-1130 1230-1630	No "	N/A "
Laboratory	9661	Mon-Fri	0730-1500	Yes	N/A
Medical	9331	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Neurology	9531	Mon-Fri	0730-1130 1230-1630	Yes "	Neurology "
Nutrition (Diet)	9655	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
OB/GYN	9641	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "

Occupational Therapy	9451	Mon-Fri	0730-1130 1230-1630	Yes "	Occupa. Therapy
Ophthalmology	9591	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Optometry	9591	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Orthopedics	9431	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Otolaryngology	9591	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Pediatrics	9631	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Physical Exam	9301	Mon-Fri	0730-1130 1230-1630	No "	PAS "
Physical Therapy	9381	Mon-Fri	0730-1130 1230-1630	Yes "	Physical Therapy
Podiatry	9431	Mon-Fri	0730-1130 1230-1630	Yes "	PAS "
Psychiatry/ Mental Health	9531	Mon-Fri	0730-1130 1230-1630	No "	Psychiatry "
Pulmonary Function	9510	Mon-Fri	0730-1130 1230-1630	Yes "	Pulmonary Function
Radiology	9561	Mon-Fri	0730-1130 1230-1630	Yes "	Radiology "
Social Work	9531	Mon-Fri	0730-1130 1230-1630	No "	Social Work
Special Clinic	9468	Mon-Fri	0730-1130 1230-1530	No "	Special Clinic
Surgical	9361	Mon-Fri	0730-1130 1230-1630	No "	Surgical "
Urology	9361	Mon-Fri	0730-1130 1230-1630	Yes	Urology "

MASTER SCHEDULE

Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Time	Code	Time	Code	Time	Code	Time	Code	Time	Code	Time	Code	Time	Code

DEPARTMENT CHIEF SIGNATURE _____ DATE

DCCS SIGNATURE _____ DATE

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PHYSICIANS CLINIC SCHEDULE
USA MEDDAC FLW, MO

NAME

CODE:

FOR _____ Month _____ 19 ____

APPROVED BY:

		CLINIC	DATE	CLINIC	DATE	CLINIC	DATE	CLINIC	DATE	CLINIC	DATE
M O N	AM										
	PM										
T U E	AM										
	PM										
W E D	AM										
	PM										
T H U	AM										
	PM										
F R I	AM										
	PM										

REMARKS:

USA MEDDAC FLW FORM 110R (Mar 74)

A-16

WORKCENTER: MEDICAL CLINIC

DATE: 31 MAR 1990
HOURS IN MONTH: 176

HOURS SPENT IN SPECIALITY

PHYSICIAN	ADMIS-SIONS	HRS INPNT	HRS MED/CL	VISITS MED/CL	HRS CARDIO	VISITS CARDIO	HRS GASTRO	VISITS GASTRO	TOTAL CL/HR	TOTAL VISITS	VISITS PER HR	HOURS OTH SPT	HRS TOT
CUARTAS	14	23	8	94 [1.]		4	30	48	38	146	3.8	91 ADM	
LITTLE	38	122	122	219		7		2	122	228	1.9		
PELLER	23	56	157	199		1		3	157	203	1.3	11	
ELECKENSTEIN	37	123	98	247	25	9			123	256	2.1		
WADDELL	5	5	5	5		1			5	6	1.2	1	
PARTNERSHIP	4		144	331	7	23			151	354	2.3		
LOPEZ(NP)			144	265		2			144	267	1.9		
DURAN(NP)			136	235		8			136	243	1.8		
TOTAL	116	329	814	1595	32	55	30	53	876	1703	1.9	103	

WORKLOAD:
CLINIC VISITS: 1595   55   53   1703

OCC BED DAYS: 493

VISITS PER HOUR: 2.0   1.7   1.8   1.9

MS3 STAFFING
STANDARD: INT MED, CARDIO, GASTRO, ONCOLOGY, PUL DIS = 258 MAXIMUM VISITS PER PHYSICIAN.
95 BED DAYS PER PHYSICIAN.
450 MAXIMUM VISITS PER NURSE PRACTITIONER.
4 PHYSICIANS ASSIGNED
2 NURSE PRACTITIONERS ASSIGNED
.9 MM CHAMPUS PARTNERSHIP PHYSICIANS UTILIZATION

ANALYSIS: Based on the current MS3 standards, the total clinic visits justifies 5 physicians and 2 nurse practitioners. The staffing standard also states that those 5 physicians have the capability of accomplishing 95 bed days each or a total of 475 bed days.

*Chief of Department not staffed for clinic visits.
1. Includes visits from oncology and pulmonary disease.

(1)

WORKCENTER: PEDIATRIC CLINIC

DATE: 31 MAR 1990
HOURS IN MONTH: 176

HOURS SPENT IN SPECIALITY

PHYSICIANS	ADMISSIONS	HOURS INPNT CARE	HOURS CLINIC	VISITS CLINIC	HOURS EFMP	SCREENING EFMP	PEDS VISITS PER HOUR	TOTAL HRS WKD
BESENBRUCH	17	50	115	453			3.9	165
BOWER	22	26	144	620			4.3	170
*ZAIDMAN			61	99	113	167	1.6/1.5	174
BURKE	11	18	101	394			3.9	119
ZIMMERLY(FLT SURG)			19	37			1.9	19
WALTMAN(NP)			119	365			3.1	119
TOTAL	50	94	559	1968	113	167	3.5/1.5	766

WORKLOAD:
CLINIC VISITS: 1968

OCC BED DAYS: 193

VISITS PER HOUR: 3.5

MS3 STAFFING
STANDARD: 441 MAXIMUM VISITS PER PHYSICIAN
70 BED DAYS PER PHYSICIAN
500 VISITS PER NURSE PRACTITIONER

ANALYSIS: Based on the current MS3 standards, the total clinic visits justifies 3 physicians and 2 nurse practitioners. The staffing standards also states that those 3 physicians have the capability of accomplishing 70 bed days each or a total of 210 bed days.
1 physician recognized for EFMP.
3 PHYSICIANS ASSIGNED
1 EFMP PHYSICIAN ASSIGNED
1 NURSE PRACTITIONER ASSIGNED

Dr. Bower 2 1/2 days admin leave.
Dr. Besenbruch 5 days TDY.

Dr. Burke 1 day admin leave, 7 days TDY.
Maj Waltman 1 day leave, 4 days TDY.
(4)

HOURS SPENT IN SPECIALTY

PHYSICIAN	ADMIS-SIONS	HOURS GOPC	VISITS GOPC	HOURS AVN MED	VISITS AVN MED	ARD RNDS	OTH HOURS SPT TMC/PA	SUPV	2. VISITS TMC	TOTAL VISITS	TOTAl HRS WKl
*HABERMAN	33	56	71			4	16				76
*ARJONA	72	66	183			75					141
*WONDERLY	5	173	686								173
*PARTNERSHIP PHY		191	816								191
1.ZIMMERLY	29	55	336	98	139	10	10	19			192
CONTRACT PHY		156	239								156
PAs											
PLANK (#1)		21	73				136				157
KERNS (#4)			4				8		1567		8
CHAFFIN (GOPC)		36	160				143				179
HUME (#3)		36	142				140		1469		176
BUCKLEY(#1)		30	155				130		1764		160
TMC #2									1629		
CHRISTIE(PMS)						18		180			198
TOTAL	139	820	2915	98	139	107	583	199	6429		1807

WORKLOAD:
  CLINIC VISITS: 2915

OCC BEDS (DA) 14.2

VISITS PER HOUR: 3.6

STAFFING GUIDE CRITERIA GOPC: 750 VISITS PER PHYSICIAN FOR 168 HR MONTH.

ANALYSIS:
  1.0 PHYSICIANS JUSTIFIED FOR AVIATION MEDICINE
  3.9 PHYSICIANS JUSTIFIED BY GOP CLINIC VISITS
   .5 PHYSICIANS JUSTIFIED BY OCCUPIED BEDS (ARD)
  5.4 PHYSICIANS JUSTIFIED
   3 PHYSICIANS ASSIGNED
   1 CONTRACT PHYSICIAN
  1.1 MM CHAMPUS PARTNERSHIP PHYSICIAN
   1 PHYSICIAN ASSISTANT

(16)

HOURS SPENT IN SPECIALTY

PHYSICIANS	ADMIS-SIONS	HOURS INPNT CARE	HOURS CLINIC	VISITS CLINIC	VISITS PER HR	HOURS ADM/OTH	TOTAL HRS WKD
*BAILEY	8		64	182	2.8	95	159
LOPEZ	12	8	150	458	3.1		158
RANEY	15	48	145	476	3.3		193
HANSEN	3		8	23	2.9	115	123
FISHER	14	31	91	330	3.6		122
AIGNER	12	42	128	417	3.6		170
ZIMMERLY(FLT SURG)				4			
TOTAL	64	129	586	1090	3.2	210	925

WORKLOAD:
CLINIC VISITS: 1890

OCC BEDS (DA AVG): 11.2

VISITS PER HOUR: 3.2

STAFFING GUIDE
CRITERIA: CRITERIA USED BY LAST MANPOWER SURVEY TEAM = 500 VISITS PER PHYSICIAN.
1 PHYSICIAN PER EACH 30 OCCUPIED BEDS

ANALYSIS: 3.8 PHYSICIANS JUSTIFIED BY CLINIC VISITS
.4 PHYSICIANS JUSTIFIED BY OCCUPIED BEDS
4.2 PHYSICIANS JUSTIFIED
5 PHYSICIANS ASSIGNED

*Chief of Department is not staffed for clinic visits

Dr. Hansen 6 days leave, 1 day PASS.   Dr. Bailey 4 days leave.
Dr. Raney 2 days PASS.   Dr. Lopez 5 days leave, 1 day PASS.
Dr. Fisher 3 days leave, 1 day PASS, 5 days TDY.   Dr. Aigner 1 day admin leave.

(18)

3-4

WORKCENTER: OB-GYN CLINIC

HOURS SPENT IN SPECIALITY

PHYSICIANS	ADMIS-SIONS	HOURS INPNT CARE	HOURS OB CL	VISITS OB CL	HOURS GYN CL	VISITS GYN CL	TOTAL CL HRS	TOTAL CL VISITS	VISITS PER HR	TOTAL HRS WKD
BOLING	22	80	60	139	61	168	121	307	2.5	201
PERCELL	29	110	54	116	55	194	109	310	2.8	219
ACOSTA	20	80	40	136	40	199	80	335	4.2	160
CHESTER	18	88	66	69	66	157	132	226	1.7	220
PARTNERSHIP					32	81	32	81	2.5	32
TOTAL	89	358	220	460	254	799	474	1259	2.7	832

WORKLOAD:
CLINIC VISITS: OB CL 460   GYN CL 799   TOTAL CL VISITS 1259

OCC BEDS (DA AVG):   8.4

VISITS PER HOUR: OB CL 2.1   GYN CL 3.1   TOTAL 2.7

STAFFING GUIDE
CRITERIA: OB = 525 VISITS PER PHYSICIAN. GYN = 400 VISITS PER PHYSICIAN
1 PHYSICIAN PER EACH 30 OCCUPIED BEDS

ANALYSIS:
.9 PHYSICIANS JUSTIFIED BY OB CLINIC VISITS
2.0 PHYSICIANS JUSTIFIED BY GYN CLINIC VISITS
.3 PHYSICIAN JUSTIFIED BY OCCUPIED BEDS
3.2 PHYSICIANS JUSTIFIED
4 PHYSICIANS ASSIGNED
.2 MM CHAMPUS PARTNERSHIP PHYSICIAN UTILIZED

Dr. Chester 2 days PASS, 2 days admin leave.   Dr. Boling 2 days admin leave, 5 days TDY.
Dr. Acosta 1 day sick.   Dr. Percell 1 day pass.
                                                  (11)

B-5

HOURS SPENT IN SPECIALITY

PHYSICIANS	ADMISSIONS	HOURS INPNT CARE	HOURS CLINIC	VISITS CLINIC	VISITS PER HOUR	HOURS OTH SPT	TOTAL HRS WKD
JANDA	14	77	62	202	3.3	15	154
DIXON	23	94	94	206	2.2	21	209
PLACE	32	67	100	120	1.2		167
SABIN(PA)		35	142	199	1.4		177
SNYDER(PA)		37	148	200	1.4		185
ORTHO TECHS				326			
TOTAL	69	310	546	1253		36	892

WORKLOAD:
CLINIC VISITS: 1253

OCC BED DAYS: 541

MS3 STAFFING
STANDARD: 350 MAXIMUM CLINIC VISITS PER PHYSICIAN.
           125 BED DAYS PER PHYSICIAN.

ANALYSIS: Based on the current MS3 standard, the total clinic visits justifies 4 physicians.
           The staffing standard also states that each physician has the capability of
           accomplishing 125 bed days or a total of 500 bed days.
           3 PHYSICIANS ASSIGNED
           2 PHYSICIAN ASSISTANTS ASSIGNED

           Dr. Janda 5 days leave, 1 day pass.
           Dr. Place 5 days TDY, 3 days leave.
           Mr. Snyder 1 day CT.
           Mr. Sabin 1 1/2 day CT.

                                      (8)

FROM _17 July_ TO _23 July 55_

	PATIENT SEEN		PATIENT REERRED	
	LAST WEEK	THIS WEEK	LAST WEEK	THIS WEEK
TROOP MEDICAL CLINICS:	2017	1851	-50	423
WEEKEND SICK CALL:	209	316	81	5
TMC 6:	880	617		
PIT:	1611	2302		
MED REC SCREENED:	1755	729		
BICILLIN:	495	535		
IMMUNIZATIONS:	1905	4856		

MONTHLY TMC WORKLOAD DATA

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	*JUN	JUL	AUG	SEP
ROOP MEDICAL CLINIC: EEN:	4615	4350	2862	4765	4318	5676	5362	5527	7650	5538		
EFERRED:	966	847	611	1023	558	1182	1201	1133	1876	328		
EEKEND SICK CALL:	737	730	315	731	711	758	565	655	503	1300		
MC 6	1630	2019	805	2002	2953	2048	1865	3066	6364	2297		
IT:						1541	1362	6553	5364	6357		
ED REC SCREENED:	3075	2272	1245	2034	2073	2321	2355	2276	6771	3056		
ICILLIN:	734	1778	372	1550	1602	1603	1365	2461	4783	1-50		
MUNIZATIONS:	2657	1504	5250	17325	13505	1576	16758	21133	50421	727		

WEEKLY CLINIC WORKLOAD REPORT FOR WEEK OF 14 - 20 MAY 1990

CLINICS	PATIENT SEEN	NO SHOWS	CLINIC CANCEL	AVG FIRST AVAIL ROUTINE APPT
ALLERGY	144	1	0	AWAITING NEW DOC
AUDIOLOGY	52	6	3	7.3 DAY TO WEEK 4
DERM SVC	138	6	4	10.5 DAY TO WEEK 4
FAM PRAC	458	7	0	3.7 DAY
GOC	634	6	9	N/A
IMMUN	283	0	0	N/A
MED CLINIC	289	1	0	10 DAY TO WEEK 6
MEN HEALTH	30	4	2	N/A
NUTRITION	37	3	0	N/A
OB/GYN	393	16	6	2 DAY TO WEEK 4
OCCUP THEA	274	6	3	TO WEEK - 3
OPHTHALMOL	91	5	0	WEEK 4 PTS BEING BKD FROM WAITING LIST
OPTOMETRY	113	3	0	WEEK 4 PTS BEING BKD FROM WAITING LIST OF OVER 450
ORTHO	239	5	4	9.5 DAY TO WEEK 4
OTO/HNS	84	4	3	3 DAY
PEDS	320	0	0	8 DAY
PHY EXAM	70	12	0	13 DAY
PODIATRY	237	1	0	TO WEEK -4
PSYCHIATRY	118	3	1	TO WEEK - 3
SOCIAL WK	146	0	2	1 DAY
SURGERY	128	0	0	2 DAY
UROLOGY	27	0	0	TO WEEK -4
TMCS	990			
PIT	1678			

| | QTR/ MONTHLY | | | WORK | | LOAD | | |
| | MAR | | | APR | | | MAY | | |
CLINICS	PATIENT SEEN	NO SHOWS	CLINIC CANCEL	PATIENT SEEN	NO SHOWS	CLINIC CANCEL	PATIENT SEEN	NO SHOWS	CLINIC CANCEL
ALLERGY	568	1	7	578	4	4	341	1	1
AUDIOLOGY	413	9	13	100	5	2	234	14	6
DERM SVC	842	15	19	722	27	10	351	8	10
FAM PRAC	2021	10	3	1987	25	5	1343	23	0
GOC	3024	37	18	3086	27	18	1859	22	17
IMMUN	700	0	0	924	0	0	839	0	0
MED CLINIC	1547	10	6	1402	22	20	1050	14	4
CMHS	156	4	0	142	5	0	81	7	2
NUTRITION	289	7	0	292	4	0	95	6	0
OB/GYN	1704	24	64	1583	57	89	982	33	39
OCCUP THEA	663	16	6	720	29	22	719	18	18
OPHTHALMOL	248	2	7	221	2	0	154	5	0
OPTOMETRY	904	9	0	614	9	0	244	9	0
ORTHO	919	19	17	542	17	2	598	22	11
OTO/HNS	378	4	7	342	4	0	230	4	3
PEDS	1749	8	1	1510	2	0	931	4	0
PHY EXAM	557	33	15	447	37	38	285	40	28
PODIATRY	927	1	15	1089	1	2	687	i	2
PSYCHIATRY	451	15	67	189	4	6	316	4	2
SOCIAL WK	309	3	1	295	4	8	323	5	2
SURGERY	604	6	1	605	7	16	344	5	0
UROLOGY	226	8	0	226	7	0	135	4	0
TMCS	6429			5251			2932		
PIT	5097			4061			3644		

---------------------- DESCRIPTIVE STATISTICS ----------------------

HEADER DATA FOR: A:PRDWORK2   LABEL: HOOTEN US ARMY BAYLOR GMP 90
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 31

                    INTERNAL MED CY 89

BEGINNING CASE NO. = 1, ENDING CASE NO. = 12

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	MONTH	12	6.5000	3.6056	1.0000	12.0000
2	APPTS	12	346.3333	98.2727	168.0000	501.0000
3	WALK IN	12	679.4167	192.1365	395.0000	1032.0000
4	TARGET	12	1100.0000	173.2051	600.0000	1200.0000
5	CLIN VIS	12	1025.0833	210.4828	702.0000	1400.0000
6	CLIN HR	12	515.7500	62.1627	388.0000	601.0000
7	ER CONS	11	8.6364	8.1887	1.0000	27.0000
8	AD	11	150.2727	32.9032	102.0000	199.0000
9	PHY ASGN	12	3.8333	.5774	2.0000	4.0000
10	PHY JUST	12	4.4583	.8816	3.0000	5.9000
11	MED	12	1.0000	.0000	1.0000	1.0000
12	PED	12	.0000	.0000	.0000	.0000
13	GOC	12	.0000	.0000	.0000	.0000
14	FPS	12	.0000	.0000	.0000	.0000
15	GYN	12	.0000	.0000	.0000	.0000
16	ORTHO	12	.0000	.0000	.0000	.0000
17	PTCANC	12	18.3333	8.2389	.0000	32.0000
18	CLINCANC	12	6.6667	16.0982	.0000	56.0000
19	NS	12	2.7500	4.1806	.0000	13.0000
20	ADMISSIO	12	84.3333	17.4530	60.0000	113.0000
21	INPT HR	12	325.0000	45.1261	251.0000	400.0000
22	tot AD	11	151.0000	33.0121	102.0000	199.0000
23	TOT AD/D	11	98.3636	18.5595	71.0000	134.0000
24	TOT RET	11	514.0909	102.5880	380.0000	676.0000
25	TOT RET	11	589.4545	121.7147	435.0000	788.0000
26	TOT RETD	11	532.3636	80.6118	404.0000	679.0000
27	TOT RETD	11	627.8182	88.5300	481.0000	793.0000
28	APPT/VIS	12	.3420	.0974	.2180	.5123
29	APPT/CLH	12	.6633	.1464	.4330	.8336
30	APPT/PHY	12	90.8542	22.2088	42.0000	125.2500
31	APPT/ADM	12	4.1751	1.2465	2.4947	6.6500

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-------------------- DESCRIPTIVE STATISTICS ----------------------

HEADER DATA FOR: A:PRDWORI 2    LABEL: HOOTEN US ARMY BAYLOR GMP 90
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 31

                    PEDIATRIC CLINIC CY 89


   BEGINNING CASE NO. = 13, ENDING CASE NO. = 24

NO.  NAME        N       MEAN     STD. DEV.     MINIMUM       MAXIMUM
  1  MONTH       12     6.5000      3.6056      1.0000       12.0000
  2  APPTS       12   776.5833    195.3098    439.0000     1041.0000
  3  WALK IN      11   418.2727     97.9878    250.0000      621.0000
  4  TARGET      12  1660.8333    168.5450   1300.0000     1733.0000
  5  CLIN VIS    12  1134.8333    229.8236    739.0000     1481.0000
  6  CLIN HR     12   386.1667     58.1766    279.0000      489.0000
  7  ER CONS     12     2.0000      2.2962      .0000        6.0000
  8  AD          12      .0000       .0000      .0000         .0000
  9  PHY ASGN    12     3.8333       .7892     3.0000        4.0000
 10  PHY JUST    12     3.5667       .7353     2.0000        4.6000
 11  MED         12      .0000       .0000      .0000         .0000
 12  PED         12     1.0000       .0000     1.0000        1.0000
 13  GOC         12      .0000       .0000      .0000         .0000
 14  FPS         12      .0000       .0000      .0000         .0000
 15  GYN         12      .0000       .0000      .0000         .0000
 16  ORTHO       12      .0000       .0000      .0000         .0000
 17  PTCANC      12    28.1667      9.3889     15.0000       46.0000
 18  CLINCANC    12     2.0000      3.1042      .0000        8.0000
 19  NS          12    12.7500     10.5497      .0000       33.0000
 20  ADMISSIO    12    27.1667     21.1653     10.0000       60.0000
 21  INPT HR     12    92.1667     36.8876     50.0000      157.0000
 22  tot AD      12      .0000       .0000      .0000         .0000
 23  TOT AD/D    12  1207.6667    183.0739    879.0000     1461.0000
 24  TOT RET     12      .0000       .0000      .0000         .0000
 25  TOT RET     12      .0000       .0000      .0000         .0000
 26  TOT RETD    12    66.8333     15.7239     32.0000       91.0000
 27  TOT RETD    12    75.2500     18.4397     37.0000      110.0000
 28  APPT/VIS    12      .7018       .2384      .4755        1.4087
 29  APPT/CLH    12     2.0696       .6811     1.2766        3.7312
 30  APPT/PHY    12   200.9097     39.8201    140.7500      260.2500
 31  APPT/ADM    12    44.6494     27.5752     13.1636       89.2000
```

HEADER DATA FOR: A:FRDWORK2   LABEL: HOOTEN US ARMY BAYLOR GMP 90
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 31

GOC CY 89

BEGINNING CASE NO. = 25, ENDING CASE NO. = 36

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	MONTH	12	6.5000	3.6056	1.0000	12.0000
2	APPTS	12	689.3333	404.4296	193.0000	1517.0000
3	WALK IN	12	821.9167	332.7192	345.0000	1445.0000
4	TARGET	12	3062.5000	675.2525	2250.0000	3750.0000
5	CLIN VIS	12	1594.5833	309.8456	1133.0000	2204.0000
6	CLIN HR	12	540.1667	132.0143	328.0000	776.0000
7	ER CONS	12	.0000	.0000	.0000	.0000
8	AD	12	1115.2500	167.5807	713.0000	1301.0000
9	PHY ASGN	12	3.8333	1.0299	3.0000	5.0000
10	PHY JUST	12	3.8500	.4871	3.0000	4.8000
11	MED	12	.0000	.0000	.0000	.0000
12	PED	12	.0000	.0000	.0000	.0000
13	GOC	12	1.0000	.0000	1.0000	1.0000
14	FPS	12	.0000	.0000	.0000	.0000
15	GYN	12	.0000	.0000	.0000	.0000
16	ORTHO	12	.0000	.0000	.0000	.0000
17	PTCANC	12	20.0833	13.3107	8.0000	53.0000
18	CLINCANC	12	.0000	.0000	.0000	.0000
19	NS	12	5.0833	5.3676	.0000	18.0000
20	ADMISSIO	12	114.2500	48.8953	60.0000	250.0000
21	INPT HR	12	103.9167	30.4973	40.0000	153.0000
22	tot AD	12	1123.6667	168.5825	722.0000	1311.0000
23	TOT AD/D	12	475.8333	96.2750	252.0000	589.0000
24	TOT RET	12	243.4167	57.3307	145.0000	328.0000
25	TOT RET	12	297.0833	60.7131	189.0000	378.0000
26	TOT RETD	12	329.0833	56.0105	228.0000	417.0000
27	TOT RETD	12	413.7500	69.3006	289.0000	499.0000
28	APPT/VIS	12	.4171	.2079	.1255	.7955
29	APPT/CLH	12	1.2019	.4832	.4396	1.9549
30	APPT/PHY	12	171.4667	74.3881	64.3333	303.4000
31	APPT/ADM	12	7.1692	4.8684	1.2600	16.6703

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FAMILY PRACTICE CY 89

BEGINNING CASE N . = 37, ENDING CASE NO. = 48

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	MONTH	12	6.5000	3.6056	1.0000	12.0000
2	APPTS	12	1088.9167	295.9393	601.0000	1402.0000
3	WALK IN	11	727.0000	170.7589	536.0000	1102.0000
4	TARGET	12	2937.5000	594.7211	2250.0000	3750.0000
5	CLIN VIS	12	1744.6667	241.8885	1195.0000	2046.0000
6	CLIN HR	12	637.5833	91.4564	425.0000	775.0000
7	ER CONS	12	3.3333	7.3278	.0000	26.0000
8	AD	12	125.8333	16.4418	99.0000	161.0000
9	PHY ASGN	12	4.4167	.6686	3.0000	5.0000
10	PHY JUST	12	3.0167	.6162	2.4000	4.3000
11	MED	12	.0000	.0000	.0000	.0000
12	PED	12	.0000	.0000	.0000	.0000
13	GOC	12	.0000	.0000	.0000	.0000
14	FPS	12	1.0000	.0000	1.0000	1.0000
15	GYN	12	.0000	.0000	.0000	.0000
16	ORTHO	12	.0000	.0000	.0000	.0000
17	PTCANC	12	52.0833	14.4754	32.0000	78.0000
18	CLINCANC	12	13.0000	17.0880	.0000	52.0000
19	NS	12	17.0833	8.7849	8.0000	35.0000
20	ADMISSIO	12	43.6667	18.4407	18.0000	90.0000
21	INPT HR	12	103.4167	43.9141	29.0000	186.0000
22	tot AD	12	126.0833	16.4397	99.0000	161.0000
23	TOT AD/D	12	1315.0000	233.0720	848.0000	1663.0000
24	TOT RET	12	227.2500	283.6150	109.0000	1126.0000
25	TOT RET	12	232.0000	282.7742	114.0000	1128.0000
26	TOT RETD	12	171.5833	33.8297	120.0000	242.0000
27	TOT RETD	12	176.5833	34.9921	128.0000	254.0000
28	APPT/VIS	12	.6300	.1926	.3529	1.1071
29	APPT/CLH	12	1.7757	.6502	.8142	3.1129
30	APPT/PHY	12	256.2556	96.2733	120.2000	464.6667
31	APPT/ADM	12	30.3360	16.8857	7.1667	68.0000

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GYN CLINIC Cr 89

BEGINNING CASE NO. = 49, ENDING CASE NO. = 60

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	MONTH	12	6.5000	3.6056	1.0000	12.0000
2	APPTS	2	418.0333	166.7747	166.0000	720.0000
3	WALK IN	12	293.4167	158.2285	79.0000	568.0000
4	TARGET	12	1600.0000	.0000	1600.0000	1600.0000
5	CLIN VIS	12	712.2500	101.8190	459.0000	863.0000
6	CLIN HR	12	207.0000	36.2892	152.0000	279.0000
7	ER CONS	12	1.7500	1.3568	.0000	5.0000
8	AD	12	149.4167	28.3147	80.0000	186.0000
9	PHY ASGN	12	4.0000	.0000	4.0000	4.0000
10	PHY JUST	12	2.8667	.3339	2.1000	3.2000
11	MED	12	.0000	.0000	.0000	.0000
12	PED	12	.0000	.0000	.0000	.0000
13	GOC	12	.0000	.0000	.0000	.0000
14	FPS	12	.0000	.0000	.0000	.0000
15	GYN	12	1.0000	.0000	1.0000	1.0000
16	ORTHO	12	.0000	.0000	.0000	.0000
17	PTCANC	12	13.7500	5.4293	7.0000	23.0000
18	CLINCANC	12	2.0000	5.1346	.0000	18.0000
19	NS	12	24.0833	8.9286	9.0000	36.0000
20	ADMISSIO	12	118.4167	16.9355	83.0000	146.0000
21	INPT HR	12	291.5833	49.1518	277.0000	405.0000
22	tot AD	12	149.5833	28.3050	80.0000	186.0000
23	TOT AD/D	12	537.9167	54.3728	408.0000	639.0000
24	TOT RET	12	1.7500	2.0505	.0000	7.0000
25	TOT RET	12	1.9167	2.0652	.000	7.0000
26	TOT RETD	12	162.4167	36.4628	102.	224.0000
27	TOT RETD	12	201.5833	41.3971	123.0000	268.0000
28	APPT/VIS	12	.5878	.2051	.2204	.8879
29	APPT/CLH	12	2.0056	.7014	1.0191	3.4022
30	APPT/PHY	12	104.7083	41.6937	40.0000	180.0000
31	APPT/ADM	12	3.5701	1.3421	1.0959	6.2609

ORTHO CLINIC CY 89

BEGINNING CASE NO. = 61. ENDING CASE NO. = 72

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	MONTH	12	6.5000	3.6056	1.0000	12.0000
2	APPTS	12	267.0833	125.4443	145.0000	491.0000
3	WALKIN	11	307.2727	125.0305	85.0000	454.0000
4	TARGET	12	845.8333	180.2250	700.0000	1050.0000
5	CLIN VIS	12	547.3333	59.2626	453.0000	623.0000
6	CLIN HR	12	261.8333	24.4385	229.0000	321.0000
7	ER CONS	12	1.9167	1.8809	.0000	5.0000
8	AD	12	386.4167	73.5137	188.0000	472.0000
9	PHY ASGN	12	2.5000	.5222	2.0000	3.0000
10	PHY JUST	12	2.7667	1.0748	2.0000	5.0000
11	MED	12	.0000	.0000	.0000	.0000
12	FED	12	.0000	.0000	.0000	.0000
13	GOC	12	.0000	.0000	.0000	.0000
14	FES	12	.0000	.0000	.0000	.0000
15	GYN	12	.0000	.0000	.0000	.0000
1	ORTHO	12	1.0000	.0000	1.0000	1.0000
17	PTCANC	12	15.2500	6.4685	6.0000	29.0000
18	CLINCANC	12	12.7500	15.8121	.0000	50.0000
19	NS	12	16.6667	18.1175	.0000	65.0000
20	ADMISSIO	12	70.0833	13.2696	46.0000	95.0000
21	INPT HR	12	201.4167	27.3411	154.0000	261.0000
22	tot AD	12	397.5000	74.0436	188.0000	477.0000
23	TOT AD/D	12	146.6667	29.4258	95.0000	189.0000
24	TOT RET	12	84.5833	15.4829	52.0000	109.0000
25	TOT RET	12	99.5833	17.8145	61.0000	123.0000
26	TOT RETD	12	114.7500	18.0863	69.0000	138.0000
27	TOT RETD	12	135.3333	19.8921	79.0000	153.0000
28	APPT/VIS	12	.4991	.2541	.2713	1.0359
29	APPT/CLH	12	1.0128	.4457	.6333	1.8185
30	APPT/PHY	12	104.1389	33.0642	72.5000	163.6667
31	APPT/ADM	12	3.8096	1.5937	2.4096	7.4394

CLINIC COMPARISON CALENDAR YEAR 89

	MONTH	APPTS	WALKIN	TARGET	CLIN VIS	CLIN HR	ER CONS	A
MONTH	1.00000							
APPTS	-.22417	1.00000						
WALKIN	-.01334	.10676	1.00000					
TARGET	-.04779	.68144	.39024	1.00000				
CLIN VIS	-.16939	.78272	.65081	.75637	1.00000			
CLIN 'r'	-.07255	.63661	.64108	.62992	.86101	1.00000		
ER CONS	-.14915	-.11838	.17931	-.17659	-.00005	.16753	1.00000	
AD	.00825	-.00157	.40831	.42955	.30471	.21296	-.24818	1.00000
PHY ASGN	.00672	.56508	.11888	.62220	.47136	.47824	.02498	-.1103
PHY JUST	-.04247	.08238	.36203	-.00259	.27530	.33416	.28294	.1790
MED	-.01253	-.29859	.24666	-.35184	-.09243	.21774	.47591	-.2029.
PED	-.02421	.20442	-.19748	-.11294	.02332	-.08001	-.06625	-.3721.
GOC	.02985	.13417	.45012	.57773	.43420	.30194	-.26293	.9342
FPS	-.02421	.58869	.28028	.51891	.59557	.58318	.05592	-.2342
GYN	.02985	-.21345	-.41169	-.14586	-.41870	-.59012	-.10804	-.2169
ORTHO	-.00086	-.41245	-.36925	-.50123	-.54251	-.42258	-.08153	.0635
PTCANC	-.30508	.79810	.15429	.48059	.66563	.57982	-.04407	-.2034.
CLINCANC	-.09349	.06247	-.14072	-.10317	-.05042	-.00607	.02381	-.1114
NS	.15047	.19863	-.53490	-.01420	-.19861	-.28301	-.16371	-.2215
ADMISSIO	.13359	-.77839	.06246	.06513	-.22037	-.26811	.02638	.4038.
INPT HR	.05637	-.49699	-.21136	-.53783	-.52883	-.32232	.32818	-.2836
tot AD	.00870	-.00085	.40941	.43010	.30567	.21371	-.24818	.9999.
TOT AD/D	-.12456	.76588	.05259	.49312	.58373	.35639	-.12391	-.3247.
TOT RET	-.07804	-.06129	.51234	.15300	.25255	.57633	.31371	.1497.
TOT RET	-.08354	-.07871	.53063	.14139	.25322	.57039	.31986	.1928
TOT RETD	-.08594	-.10414	.49854	.03964	.21608	.41919	.33770	.2804
TOT RETD	-.08223	-.12636	.49585	.04227	.20100	.39436	.31306	.3329.
APPT/VIS	-.03812	.66624	-.54079	.23752	.12109	.01818	-.16110	-.2776.
APPT/CLH	-.15801	.63215	-.42327	.27223	.18186	-.11465	-.20833	-.2457.
APPT/PHY	.24677	.93257	.12134	.52835	.74047	.54920	-.12822	.0088.
APPT/ADM	-.25378	.60427	-.05604	.20360	.40121	.25109	-.07667	-.3327.

	PHY ASGN	PHY JUST	MED	PED	GOC	FFS	GYN	ORTH
PHY ASGN	1.00000							
PHY JUST	.22758	1.00000						
MED	.05119	.51162	1.00000					
PED	.05119	.12946	-.19298	1.00000				
GOC	.06272	.29816	-.20336	-.20336	1.00000			
FPS	.33732	-.26150	-.19298	-.19298	-.20336	1.00000		
GYN	.15445	-.29252	-.20336	-.20336	-.21429	-.20336	1.00000	
ORTHO	-.66411	-.29225	-.19298	-.19298	-.20336	-.19298	-.20336	1.00000
PTCANC	.33813	-.02872	-.17994	.11682	-.12263	.73977	-.30268	-.2363
CLINCANC	-.21362	-.24681	-.11875	-.11875	-.22356	.22761	-.13334	.37973
NS	.10186	-.17170	-.36957	-.05609	-.27961	.13984	.43955	.1202.
ADMISSIO	-.02007	.07177	.08108	-.54948	.40207	-.33992	.44745	-.0711.
INPT HR	.01649	.22309	.60250	-.39712	-.38028	-.36209	.47581	.0578
tot AD	-.10971	.17489	-.20266	-.37208	.97779	-.23422	-.21503	.0611.
TOT AD/D	.38656	-.12002	-.47740	.53022	-.14626	.62727	-.08757	-.4340.
TOT RET	.21307	.42618	.68398	-.36261	.14008	.11758	-.37815	-.1882
TOT RET	.19720	.46534	.71051	-.37714	.18277	.06527	-.38949	-.1881
TOT RETD	.18481	.60050	.81876	-.44357	.18208	-.16554	-.17689	-.2185.
TOT RETD	.16526	.60080	.79842	-.44154	.33479	-.21005	-.16725	-.3102.
APPT/VIS	.40645	-.05461	-.40220	-.21462	-.20730	.19722	.11076	-.1168.

	PTCANC	CLINCANC	NS	ADMISSIO	INFT HR	tot AD	TOT AD/D	TOT RET
'ANC	1.00000							
NCANC	.21123	1.00000						
	.13693	.06274	1.00000					
IISSIO	-.45694	-.20256	.08472	1.00000				
'T HR	-.43847	-.05934	.10654	.42256	1.00000			
AD	-.20264	-.11228	-.22215	.40419	-.28405	1.00000		
AD/D	.72429	.03765	.16187	-.52793	-.61395	-.32409	1.00000	
RET	.04110	-.06334	-.40748	.12353	.26224	.15017	-.32840	1.00000
RET	.01037	-.07843	-.43072	.15527	.27736	.19331	-.36896	.99612
RETD	-.11865	-.16037	-.38706	.35856	.46743	.28070	-.49738	.75172
RETD	-.15807	-.18160	-.39936	.38940	.46009	.33326	-.52685	.73873
T/VIS	.38550	.09881	.65132	-.25906	-.15126	-.27743	.52825	-.39366
T/CLH	.36267	.01907	.56280	-.12413	-.18899	-.24545	.60341	-.51106
T/PHY	.79386	.14616	.20329	-.42924	-.56146	.00946	.76191	-.14057
T/ADM	.59563	.16331	-.01754	-.69396	-.47108	-.33212	.76858	-.26277

	TOT RET	TOT RETD	TOT RETD	APPT/VIS	APPT/CLH	APPT/PHY	APPT/ADM
RET	1.00000						
RETD	.79499	1.00000					
RETD	.78509	.99636	1.00000				
T/VIS	-.41857	-.39834	-.41296	1.00000			
T/CLH	-.53134	-.41887	-.42610	.87661	1.00000		
T/PHY	-.15594	-.17461	-.19449	.61483	.60122	1.00000	
T/ADM	-.28437	-.36490	-.38455	.45409	.47054	.63694	1.00000

ITICAL VALUE (1-TAIL, .05) = + 0r - .20128
ITICAL VALUE (2-tail, .05) =   +/- .23848

= 68

MISSING DATA CASES ENCOUNTERED.

```
HEADER DATA FOR: A:PRODWORK    LABEL: HOOTEN GMP 90
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 31

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INDEX       NAME            MEAN          STD.DEV.
  1         APPTS          600.4225        369.7039
  2         CLIN HR        423.0563        172.2949
  3         PHY ASGN         3.7324          .8444
  4         WALKIN          56.7887        217.7802
  5         AD/D           631.2113        490.6110
DEP. VAR.:  CLIN VIS      1130.9155        481.0403
```

1 MISSING DATA CASES ENCOUNTERED.

DEPENDENT VARIABLE: CLIN VIS

VAR.	REGRESSION COEFFICIENT	STD. ERROR	T(DF= 65)	PROB.	PARTIAL r 2
APPTS	.2625	.1260	2.084	.04111	.0626
CLIN HR	1.9133	.1804	10.608	.00000	.6339
PHY ASGN	-29.6681	34.9235	-.850	.39871	.0110
WALKIN	.1831	.1105	1.657	.10234	.0405
AD/D	.1913	.0771	2.480	.01573	.0865
CONSTANT	143.4433				

STD. ERROR OF EST. = 196.5645

ADJUSTED R SQUARED = .8330
         R SQUARED = .8450
       MULTIPLE R = .9192

ANALYSIS OF VARIANCE TABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F RATIO	PROB.
REGRESSION	13686540.3100	5	2737308.0620	70.846	.000E+00
RESIDUAL	2511445.1830	65	38637.6182		
TOTAL	16197985.4930	70			

-------------------- REGRESSION ANALYSIS -----------------------

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 31

_____

INDEX	NAME	MEAN	STD.DEV.
1	APPTS	600.4225	369.7039
2	CLIN HR	423.0563	172.2949
3	PHY ASGN	3.7324	.8444
4	WALKIN	56.7887	217.7802
5	AD/D	631.2113	490.6110
DEP. VAR.:	CLIN VIS	1130.9155	481.0403

1 MISSING DATA CASES ENCOUNTERED.

DEPENDENT VARIABLE: CLIN VIS

VAR.	REGRESSION COEFFICIENT	STD. ERROR	T(DF= 67)	PROB.	PARTIAL r 2
APPTS	.4796	.0921	5.210	.00000	.2883
CLIN HR	1.8827	.1819	10.349	.00000	.6152
PHY ASGN	-36.0700	36.7376	-.982	.32972	.0142
CONSTANT	181.0861				

STD. ERROR OF EST. = 207.2450

ADJUSTED R SQUARED = .8144
        R SQUARED = .8223
    MULTIPLE R = .9068

ANALYSIS OF VARIANCE TABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F RATIO	PROB.
REGRESSION	13320302.2041	3	4440100.7347	103.377	.000E+00
RESIDUAL	2877683.2889	67	42950.4968		
TOTAL	16197985.4930	70			

```
-------------------- REGRESSION ANALYSIS --------------------
DEPENDENT VARIABLE: CLIN VIS

VAR.    REGRESSION COEFFICIENT    STD. ERROR    T(DF=  69)    PROB.
APPTS              .9523              .1067         8.922     .00000
CONSTANT         559.1200

STD. ERROR OF EST. = 330.1494

          r SQUARED = .5357
                  r = .7319

                    ANALYSIS OF VARIANCE TABLE

 SOURCE          SUM OF SQUARES    D.F.     MEAN SQUARE     F RATIO  PROB.
REGRESSION        8677079.0357      1      8677079.0357     79.607 4.500E-13
RESIDUAL          7520906.4573     69       108998.6443
TOTAL            16197985.4930     70
```

```
--------------------- REGRESSION ANALYSIS ---------------------
DEPENDENT VARIABLE: CLIN VIS

VAR.    REGRESSION COEFFICIENT    STD. ERROR   T(DF=  69)     PROB.
APPTS              .9523             .1067       8.922       .00000
CONSTANT         559.1200

STD. ERROR OF EST. = 330.1494

        r SQUARED = .5357
             r = .7319

                   ANALYSIS OF VARIANCE TABLE

 SOURCE         SUM OF SQUARES    D.F.      MEAN SQUARE    F RATIO   PROB.
REGRESSION       8677079.0357      1       8677079.0357   79.607 4.500E-13
RESIDUAL         7520906.4573     69        108998.6443
TOTAL           16197985.4930     70
```

```
-------------------- REGRESSION ANALYSIS --------------------
DEPENDENT VARIABLE: APPTS

VAR.    REGRESSION COEFFICIENT    STD. ERROR    T(DF=  68)    PROB.    PARTIAL r 2
CLIN HR            .8814              .2145        4.109       .00011      .1989
PHY ASGN        170.3715            43.7661        3.893       .00023      .1822
CONSTANT        -408.3366

STD. ERROR OF EST. = 273.0218

ADJUSTED R SQUARED = .4546
        R SQUARED = .4702
       MULTIPLE R = .6857

               ANALYSIS OF VARIANCE TABLE

 SOURCE         SUM OF SQUARES   D.F.     MEAN SQUARE    F RATIO   PROB.
REGRESSION       4498886.1095     2       2249443.0547   30.177 4.162E-10
RESIDUAL         5068781.2145    68         74540.9002
TOTAL            9567667.3239    70
```

```
-------------------- REGRESSION ANALYSIS --------------------
DEPENDENT VARIABLE: APPTS

VAR.    REGRESSION COEFFICIENT    STD. ERROR    T(DF=  69)    PROB.
CLIN HR          1.2734              .2079         6.124      .00000
CONSTANT        61.7216

STD. ERROR OF EST. = 299.7184

         r SQUARED = .3522
               r = .5934
```

ANALYSIS OF VARIANCE TABLE

```
  SOURCE        SUM OF SQUARES    D.F.     MEAN SQUARE     F RATIO   PROB.
REGRESSION       3369318.3365      1      3369318.3365     37.507  4.928E-08
RESIDUAL         6198348.9875     69        89831.1447
TOTAL            9567667.3239     70
```

HEADER DATA FOR: A:PRODWORI   LABEL: HOOTEN GMP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33

HOOTEN GMP 1990 US ARMY BAYLOR

BEGINNING CASE NO. = 1, ENDING CASE NO. = 12

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	APPTS	12	346.3333	98.2727	168.0000	501.0000
2	WALK IN	12	679.4167	192.1365	395.0000	1032.0000
3	TARGET	12	1150.0000	173.2051	600.0000	1200.0000
4	CLIN VIS	12	1025.0833	210.4828	702.0000	1400.0000
5	CLIN HR	12	515.7500	62.1627	388.0000	601.0000
6	ER VISIT	12	2395.6667	206.0385	2123.0000	2823.0000
7	ER CONS	11	8.6364	8.1887	1.0000	27.0000
8	AD	11	150.2727	32.9032	102.0000	199.0000
9	AD/D	11	96.4545	17.6089	71.0000	131.0000
10	RET	11	440.0000	86.3053	326.0000	583.0000
11	RET/D	11	463.1818	70.6000	343.0000	582.0000
12	N RET	11	74.0909	18.3655	48.0000	115.0000
13	N RETD	11	69.1818	13.1363	50.0000	97.0000
14	F AD	11	.7273	.9045	.0000	3.0000
15	F AD/D	11	1.9091	1.5783	.0000	4.0000
16	F RET	11	75.3636	22.1101	48.0000	112.0000
17	F RET/D	11	95.4545	12.0943	76.0000	114.0000
18	PHY ASGN	12	3.8333	.5774	2.0000	4.0000
19	PHY JUST	12	4.4583	.8816	3.0000	5.9000
20	MED	12	1.0000	.0000	1.0000	1.0000
21	PED	12	.0000	.0000	.0000	.0000
22	GOC	12	.0000	.0000	.0000	.0000
23	FPS	12	.0000	.0000	.0000	.0000
24	GYN	12	.0000	.0000	.0000	.0000
25	ORTHO	12	.0000	.0000	.0000	.0000
26	PTCANC	12	18.3333	8.2389	.0000	32.0000
27	CLINCANC	12	6.6667	16.0982	.0000	56.0000
28	WALK IN	12	45.5833	157.9053	.0000	547.0000
29	NS	12	2.7500	4.1806	.0000	13.0000
30	ADMISSIO	12	84.3333	17.4530	60.0000	113.0000
31	INPT HR	12	325.0000	45.1261	251.0000	400.0000
32	CLIN HR	12	515.7500	62.1627	388.0000	601.0000
33	CLIN VIS	12	1025.0833	210.4828	702.0000	1400.0000
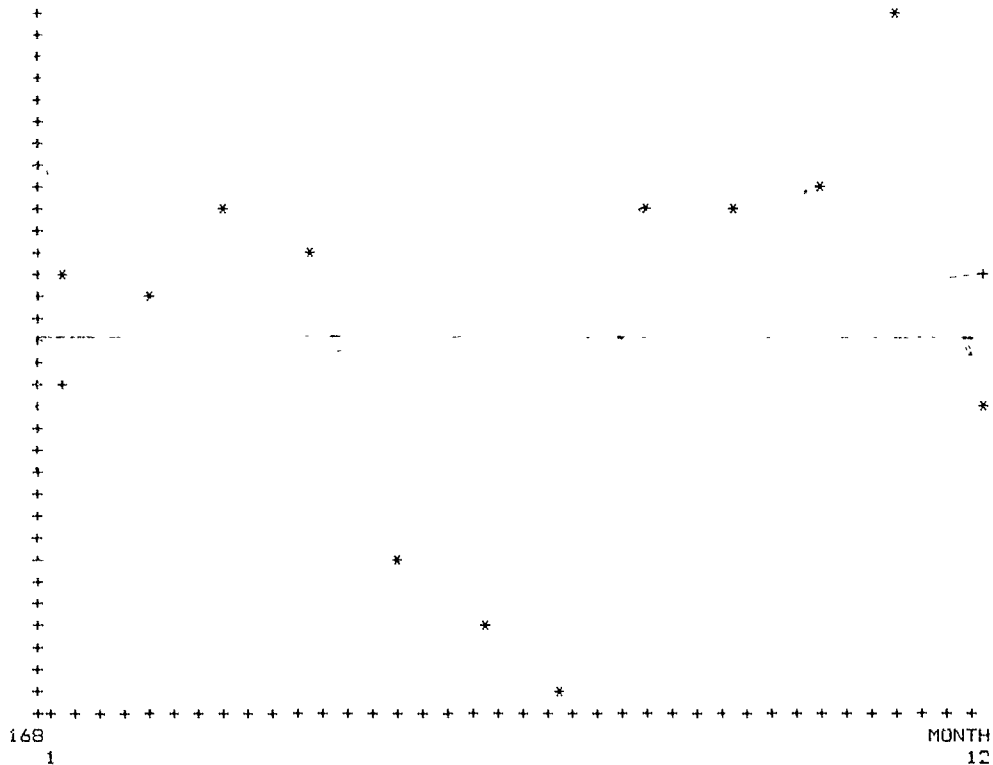
C-15

```
A/PTS
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  +  *                                                              --  +
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  +
  +                        *
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168                                                               MONTH
  1                                                                   12
```

Note: scattered asterisks represent data points on scatterplot.

MEDICAL CLINIC

HEADER DATA FOR: A:PRODWORH   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

 REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 318.74242424242   SLOPE= 4.2447552447551

   r = .1557   r squared = .0243

C-16

```
CLIN VIS
1400
  + *
  +
  +
  +
  +
  +            *
  +
  + +.
  +
  +
  +
  +
  +
  +            *
  +     *
  +
  +            *
  +
  +
  ___  __   __   ___ ___      __ __   ___ __  __
  +
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  +                              *
  +                        *
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  +          *
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  +                        *        *
  +                                 +
  +
  +
  +
  +
  +                    *
 ++ + + + + + + + + + + + + + + + + + + + + + + + + +
702                                              MONTH
  1                                                12
```

MEDICAL CLINIC

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by +'s on scatterplot):

  INTERCEPT= 1301.5151515151   SLOPE= -42.527972027976

  r = -.7285   r squared = .5307

C-17

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33

BEGINNING CASE NO. = 13, ENDING CASE NO. = 24

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	APPTS	12	776.5833	195.3098	439.0000	1041.0000
2	WALKIN	11	418.2727	97.9878	250.0000	621.0000
3	TARGET	12	1660.8333	168.5450	1300.0000	1733.0000
4	CLIN VIS	12	1134.8333	220.8236	739.0000	1481.0000
5	CLIN HR	12	386.1667	58.1766	279.0000	489.0000
6	ER VISIT	12	2395.6667	206.0385	2123.0000	2823.0000
7	ER CONS	12	2.0000	2.2962	.0000	6.0000
8	AD	12	.0000	.0000	.0000	.0000
9	AD/D	12	1192.4167	180.1900	873.0000	1430.0000
10	RET	12	.0000	.0000	.0000	.0000
11	RET/D	12	56.5833	14.1129	26.0000	75.0000
12	N RET	12	.0000	.0000	.0000	.0000
13	N RETD	12	10.2500	4.0480	6.0000	17.0000
14	F AD	12	.0000	.0000	.0000	.0000
15	F AD/D	12	15.2500	7.5091	6.0000	31.0000
16	F RET	12	.0000	.0000	.0000	.0000
17	F RET/D	12	8.4167	5.0355	2.0000	19.0000
18	PHY ASGN	12	3.8333	.3892	3.0000	4.0000
19	PHY JUST	12	3.5667	.7353	2.0000	4.6000
20	MED	12	.0000	.0000	.0000	.0000
21	PED	12	1.0000	.0000	1.0000	1.0000
22	GOC	12	.0000	.0000	.0000	.0000
23	FPS	12	.0000	.0000	.0000	.0000
24	GYN	12	.0000	.0000	.0000	.0000
25	ORTHO	12	.0000	.0000	.0000	.0000
26	PTCANC	12	28.1667	9.3889	15.0000	46.0000
27	CLINCANC	12	2.0000	3.1042	.0000	8.0000
28	WALKIN	12	51.7500	179.2673	.0000	621.0000
29	NS	12	12.7500	10.5497	.0000	33.0000
30	ADMISSIO	12	27.1667	21.1653	10.0000	60.0000
31	INPT HR	12	92.1667	36.8876	50.0000	157.0000
32	CLIN HR	12	386.1667	58.1766	279.0000	489.0000
33	CLIN VIS	12	1134.8333	220.8236	739.0000	1481.0000
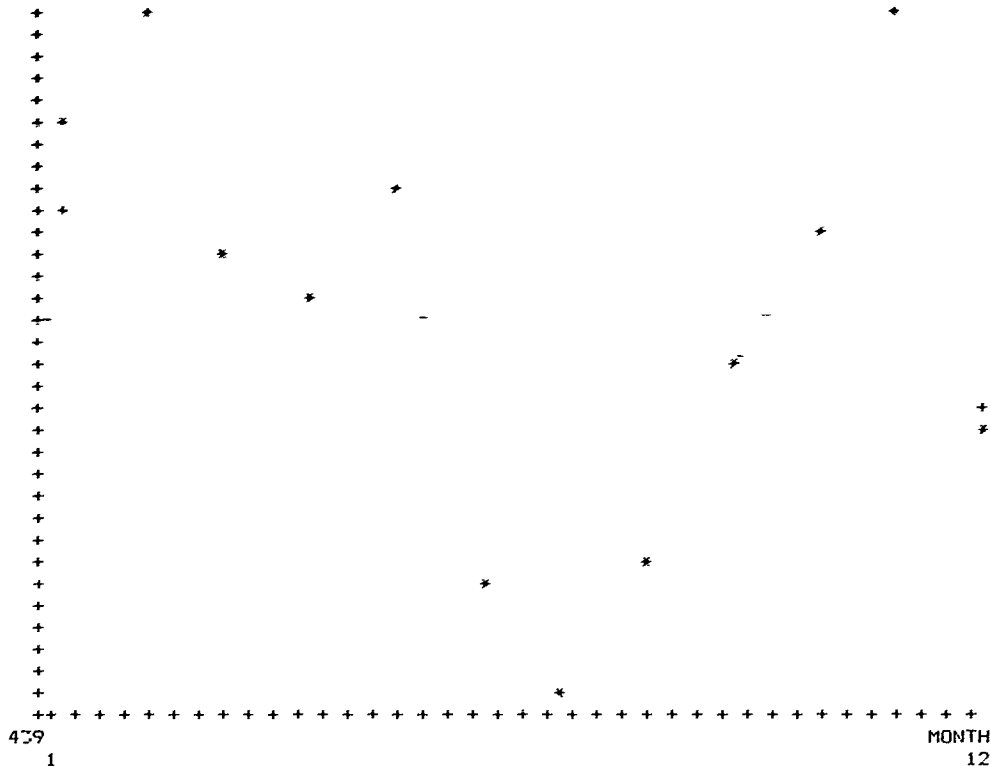
C-18

PEDIATRIC

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by r's on scatterplot):

  INTERCEPT= 875.83333333333   SLOPE= -15.269230769231

  r = -.2819   r squared = .0795

```
CLIN VIS
1481
  + +
  +
  +
  +        *
  +
  + +
  +
  +
  +
  +        *              *
  +
  +
  +
 -+              *                        *            *
  +                                                      *
  +
  +
 -+           -              -   -         -    .          -
  +
  +
  +
  +                                            +
  +
  +                    *
  +
  +                  *
  +
  +
  +
  +                                              *
 ++ + + + + + + + + + + + + + + + + + + + + + + + + + + + + +
739                                                    MONTH
  1                                                      12
```
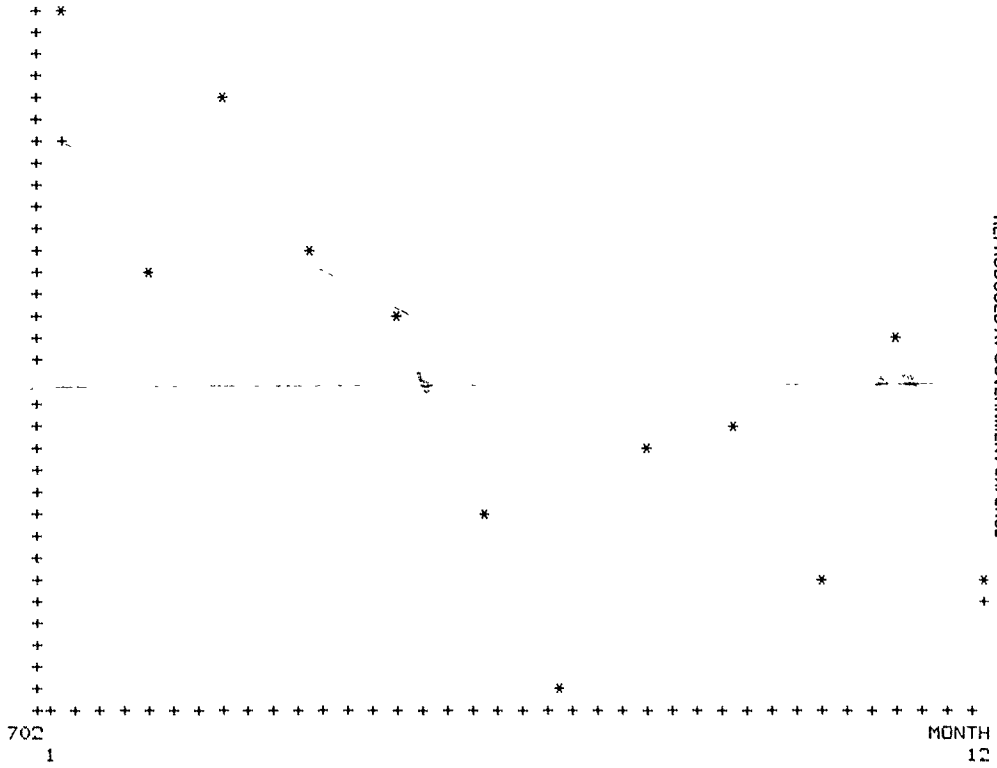
PEDIATRIC

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 'S ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

 REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 1397.6515151515   SLOPE= -40.433566433571

   r = -.6602   r squared = .4358

```
-------------------- DESCRIPTIVE STATISTICS --------------------

HEADER DATA FOR: A:PRODWORK    LABEL: HOOTEN GHP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33


   BEGINNING CASE NO. = 25, ENDING CASE NO. = 36

NO.   NAME       N        MEAN      STD. DEV.    MINIMUM      MAXIMUM
 1    APPTS      12      689.3333    404.4296    193.0000    1517.0000
 2    WALKIN     12      821.9167    332.7192    345.0000    1445.0000
 3    TARGET     12     3062.5000    675.2525   2250.0000    3750.0000
 4    CLIN VIS   12     1594.5833    309.8456   1133.0000    2204.0000
 5    CLIN HR    12      540.1667    132.0143    328.0000     776.0000
 6    ER VISIT   12     2395.6667    206.0385   2123.0000    2823.0000
 7    ER CONS    12         .0000       .0000       .0000        .0000
 8    AD         12     1115.2500    167.5807    713.0000    1501.0000
 9    AD/D       12      465.3333     95.7177    240.0000     573.0000
10    RET        12      197.0833     49.8442    117.0000     278.0000
11    RET/D      12      274.0000     50.3822    184.0000     365.0000
12    N RET      12       46.3333     19.8656     28.0000      61.0000
13    N RETD     12       55.0833     11.7818     34.0000      76.0000
14    F AD       12        8.4167      3.4761      1.0000      15.0000
15    F AD/D     12       10.5000      3.9428      3.0000      16.0000
16    F RET      12       53.6667      8.3048     44.0000      72.0000
17    F RET/D    12       84.6667     17.2697     60.0000     106.0000
18    PHY ASGN   12        3.8333      1.0299      3.0000       5.0000
19    PHY JUST   12        3.8500       .4871      3.0000       4.8000
20    MED        12         .0000       .0000       .0000        .0000
21    PED        12         .0000       .0000       .0000        .0000
22    GOC        12        1.0000       .0000      1.0000       1.0000
23    FPS        12         .0000       .0000       .0000        .0000
24    GYN        12         .0000       .0000       .0000        .0000
25    ORTHO      12         .0000       .0000       .0000        .0000
26    PTCANC     12       20.0833     13.3107      8.0000      53.0000
27    CLINCANC   12         .0000       .0000       .0000        .0000
28    WALKIN     12      120.4167    417.1356       .0000    1445.0000
29    NS         12        5.0833      5.7676       .0000      18.0000
30    ADMISSIO   12      114.2500     48.8953     60.0000     250.0000
31    INPT HR    12      103.9167     30.4973     40.0000     153.0000
32    CLIN HR    12      540.1667    132.0143    328.0000     776.0000
33    CLIN VIS   12     1594.5833    309.8456   1133.0000    2204.0000
```

```
APPTS
1517
   +              ⚡
   +
   +
   +
   +
   +
   +
   +          ⚡
   +
   +  +
   +
   +
   +
   +
   +  *
   +
   +                      ⚡
   +
   +                  ⚡              *
   +                                    *
   +                  ⁚              ‿      ⸴
   +                  ⸴
   +
   +
   +
   +                                            *
   +
   +
   +                      *                ⚡
   +                                            *
   +                                          ⚡
   +                                              +
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19⁻                                                              MONTH
   1                                                              12

                             60C


HEADER DATA FOR: A:PRODWORK     LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72    NUMBER OF VARIABLES: 32


  REGRESSION EQUATION (Shown by +'s on scatterplot):

    INTERCEPT= 1220.0151515152    SLOPE= -81.647356643357

    r = -.7279   r squared = .5298
```
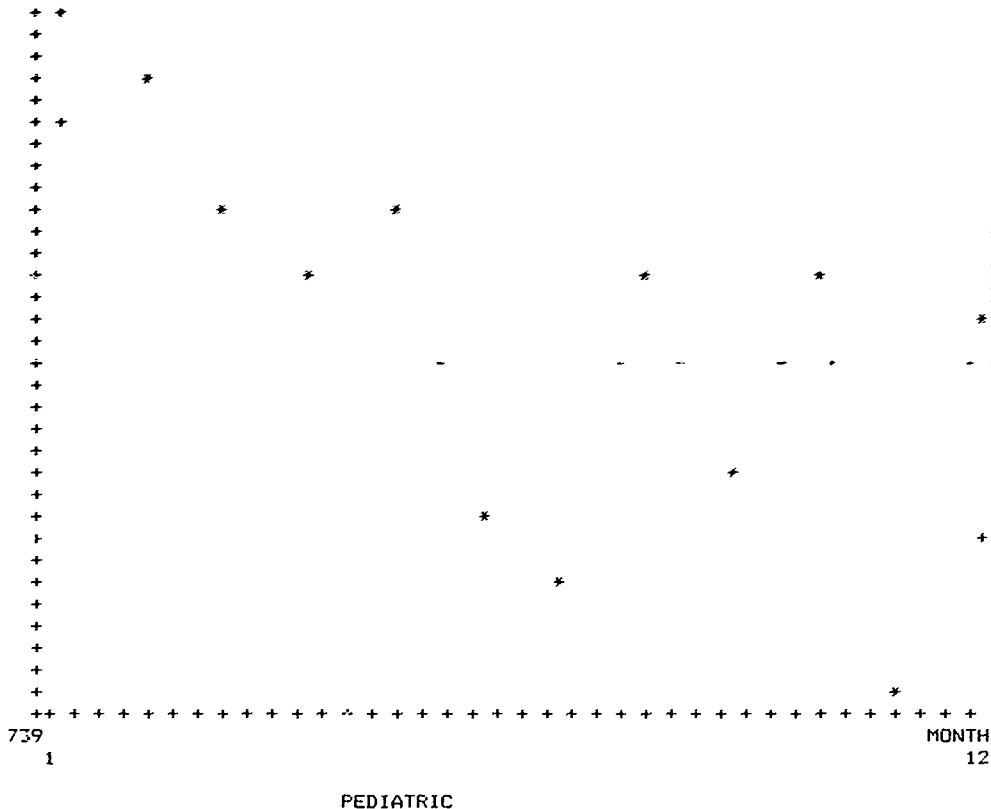
```
CLIN VIS
2204
  +                                                        *
  +
  +
  +
  +
  +
  +
  +                                                    *
  +
  +            *
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  + +
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  +
  + *        *              *
  +                              *
  +                  *
  +                              *
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  +                                          *
  +
  +                *
  +                                              *
  +
  +
  +
  +                                                        *
  ++ + + + + + + + + + + + + + + + + + + + + + + + + + + + + + +
1133                                                      MONTH
  1                                                          12
```

GOC

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMF 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 1790.4696969697   SLOPE= -30.136363636366
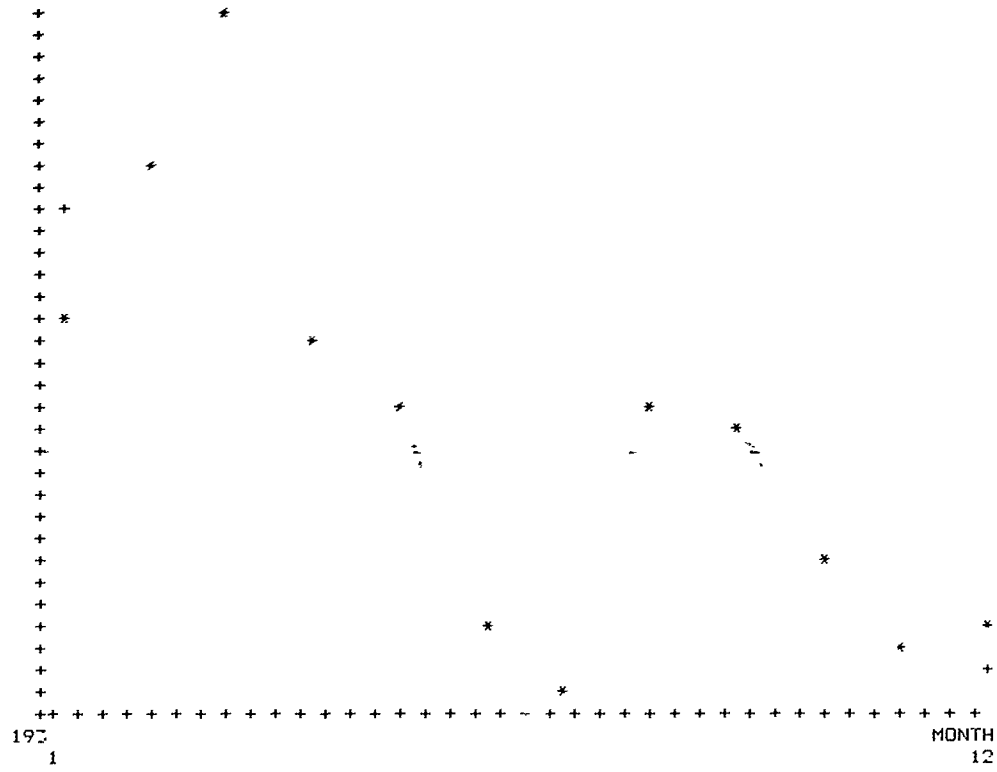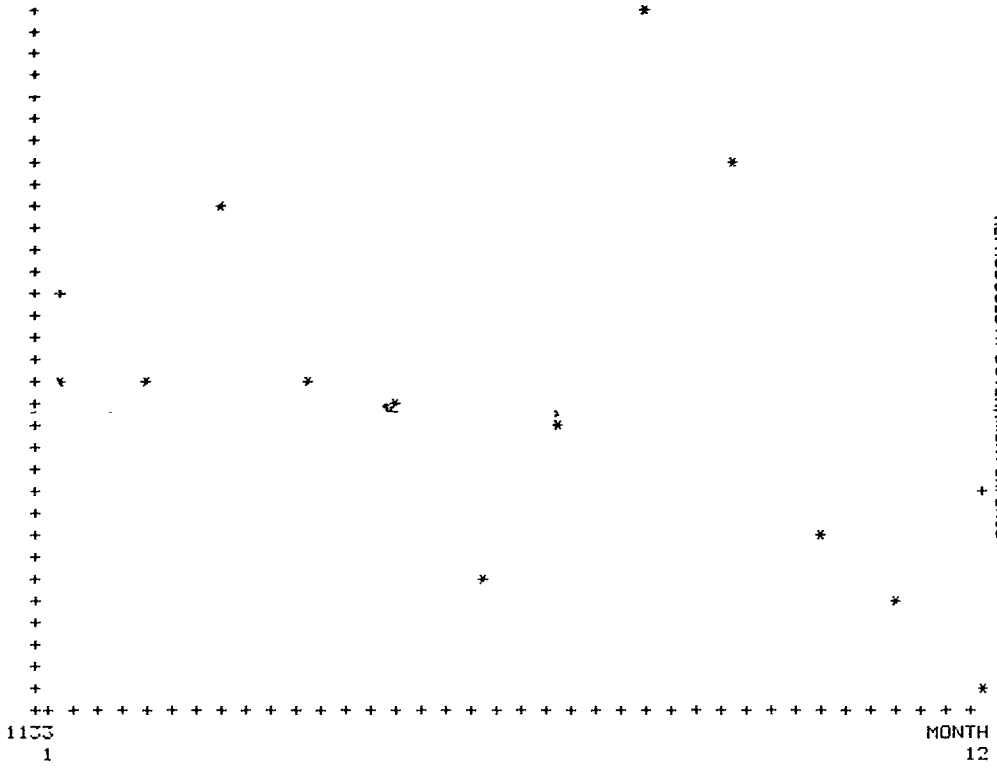
   r = -.3507   r squared = .1230

HEADER DATA FOR: A:PRODWORK   LABEL: HOTEL GMP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33

BEGINNING CASE NO. = 37, ENDING CASE NO.   48

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	APPTS	12	1088.9167	295.9373	601.0000	1402.0000
2	WALKIN	11	727.0000	170.7589	536.0000	1102.0000
3	TARGET	12	2937.5000	594.7211	2250.0000	3750.0000
4	CLIN VIS	12	1744.6667	241.8885	1195.0000	2046.0000
5	CLIN HR	12	637.5833	91.4564	425.0000	775.0000
6	ER VISIT	12	2395.6667	206.0381	2123.0000	2823.0000
7	ER CONS	12	3.3333	7.3273	.0000	26.0000
8	AD	12	125.8333	16.4418	99.0000	161.0000
9	AD/D	12	1310.0833	234.4973	846.0000	1663.0000
10	RET	12	224.8333	283.0544	109.0000	1122.0000
11	RET/D	12	167.6667	34.3043	116.0000	242.0000
12	N RET	12	2.4167	2.3916	.0000	8.0000
13	N RETD	12	1.9167	1.5050	.0000	4.0000
14	F AD	12	.2500	.6216	.0000	2.0000
15	F AD/D	12	4.9167	3.1467	.0000	12.0000
16	F RET	12	4.7500	4.0480	1.0000	15.0000
17	F RET/D	12	5.0000	2.9233	1.0000	12.0000
18	PHY ASGN	12	4.4167	.6686	3.0000	5.0000
19	PHY JUST	12	3.0167	.6162	2.4000	4.3000
20	MED	12	.0000	.0000	.0000	.0000
21	PED	12	.0000	.0000	.0000	.0000
22	GOC	12	.0000	.0000	.0000	.0000
23	FPS	12	1.0000	.0000	1.0000	1.0000
24	GYN	12	.0000	.0000	.0000	.0000
25	ORTHO	12	.0000	.0000	.0000	.0000
26	PTCANC	12	52.0833	14.4754	32.0000	78.0000
27	CLINCANC	12	13.0000	17.0880	.0000	52.0000
28	WALKIN	12	59.9167	207.5574	.0000	719.0000
29	NS	12	17.0833	8.7849	8.0000	35.0000
30	ADM???O	12	43.6667	18.4407	18.0000	90.0000
31	INPT HR	12	103.4167	43.9141	29.0000	186.0000
32	CLIN HR	12	637.5833	91.4564	425.0000	775.0000
33	CLIN VIS	12	1744.6667	241.8885	1195.0000	2046.0000
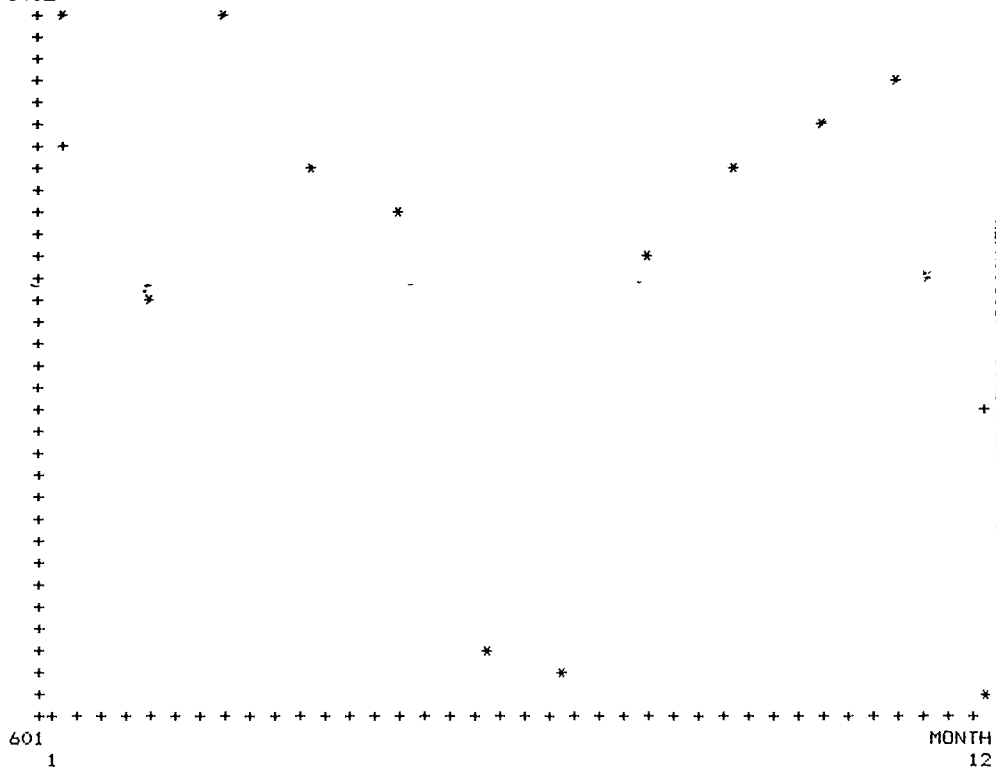
HEADER DATA FOR: A:PRODWORK   LABEL: HOTEL GMP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33

```
APPTS
1402
  + *          *
  +
  +
  +
  +
  +                                                        *
  +
  +                                                    *
  + +
  +            *                                 *
  +
  +                    *
  +
  +                                    *
  ‡            �푸              -            -                *
  +         푸
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  +                 *
  +                       *
  +                                                              *
 ++ + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + +
601                                                          MONTH
  1                                                             12
```

The text on the right side reads vertically:

                      FAMILY PRACTICE

HEADER DATA FOR: A:PRODWORI   LABEL: HOOTEN GMF 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

  REGRESSION EQUATION (Shown by +'s on scatterplot):

    INTERCEPT= 1263.2575757576   SLOPE= -26.821678321682

    r = -.3268   r squared = .1068

```
CLIN VIS
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1195                                                                    MONTH
   1                                                                       12
```
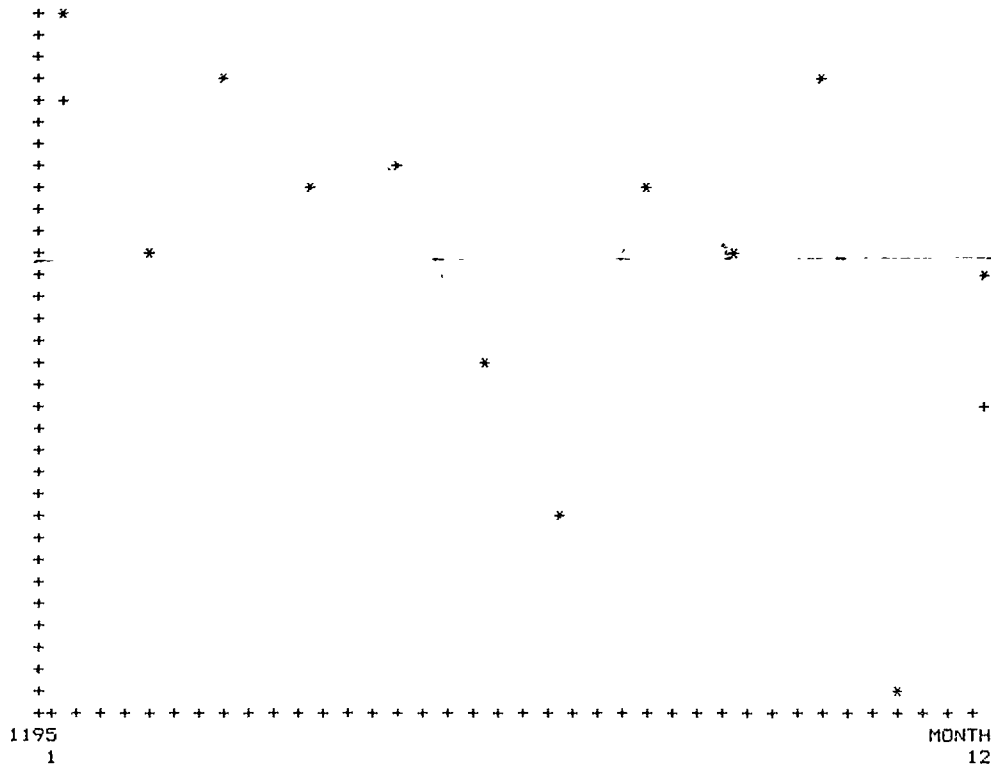
FAMILY PRACTICE

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

 REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 1957.12121212127   SLOPE= -32.685314685319

   r = -.4872   r squared = .2374

```
------------------- DESCRIPTIVE STATISTICS ---------------------

HEADER DATA FOR: A:PRODWORK    LABEL: HOOTEN GMP 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33


   BEGINNING CASE NO. = 49, ENDING CASE NO. = 60
```

NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	APPTS	12	418.8333	166.7747	160.0000	720.0000
2	WALKIN	12	293.4167	158.2285	79.0000	568.0000
3	TARGET	12	1600.0000	.0000	1600.0000	1600.0000
4	CLIN VIS	12	712.2500	101.8190	459.0000	863.0000
5	CLIN HR	12	207.0000	36.2892	152.0000	279.0000
6	ER VISIT	12	2395.6667	206.0385	2123.0000	2823.0000
7	ER CONS	12	1.7500	1.3568	.0000	5.0000
8	AD	12	149.4167	28.3147	80.0000	186.0000
9	AD/D	12	534.0000	53.3871	408.0000	637.0000
10	RET	12	1.1667	1.4668	.0000	4.0000
11	RET/D	12	145.8333	32.5767	88.0000	197.0000
12	N RET	12	.5833	.9003	.0000	3.0000
13	N RETD	12	22.5833	6.8018	14.0000	34.0000
14	F AD	12	.1667	.5774	.0000	2.0000
15	F AD/D	12	3.9167	2.5030	.0000	8.0000
16	F RET	12	.1667	.5774	.0000	2.0000
17	F RET/D	12	33.1667	8.6638	21.0000	46.0000
18	PHY ASGN	12	4.0000	.0000	4.0000	4.0000
19	PHY JUST	12	2.8667	.3339	2.1000	3.2000
20	MED	12	.0000	.0000	.0000	.0000
21	PED	12	.0000	.0000	.0000	.0000
22	GOC	12	.0000	.0000	.0000	.0000
23	FPS	12	.0000	.0000	.0000	.0000
24	GYN	12	1.0000	.0000	1.0000	1.0000
25	ORTHO	12	.0000	.0000	.0000	.0000
26	PTCANC	12	13.7500	5.4293	7.0000	23.0000
27	CLINCANC	12	2.0000	5.1346	.0000	18.0000
28	WALKIN	12	36.1667	125.2850	.0000	434.0000
29	NS	12	24.0833	8.9286	9.0000	36.0000
30	ADMISSIO	12	118.4167	16.9355	83.0000	146.0000
31	INPT HR	12	291.5833	49.1518	233.0000	405.0000
32	CLIN HR	12	207.0000	36.2892	152.0000	279.0000
33	CLIN VIS	12	712.2500	101.8190	459.0000	863.0000
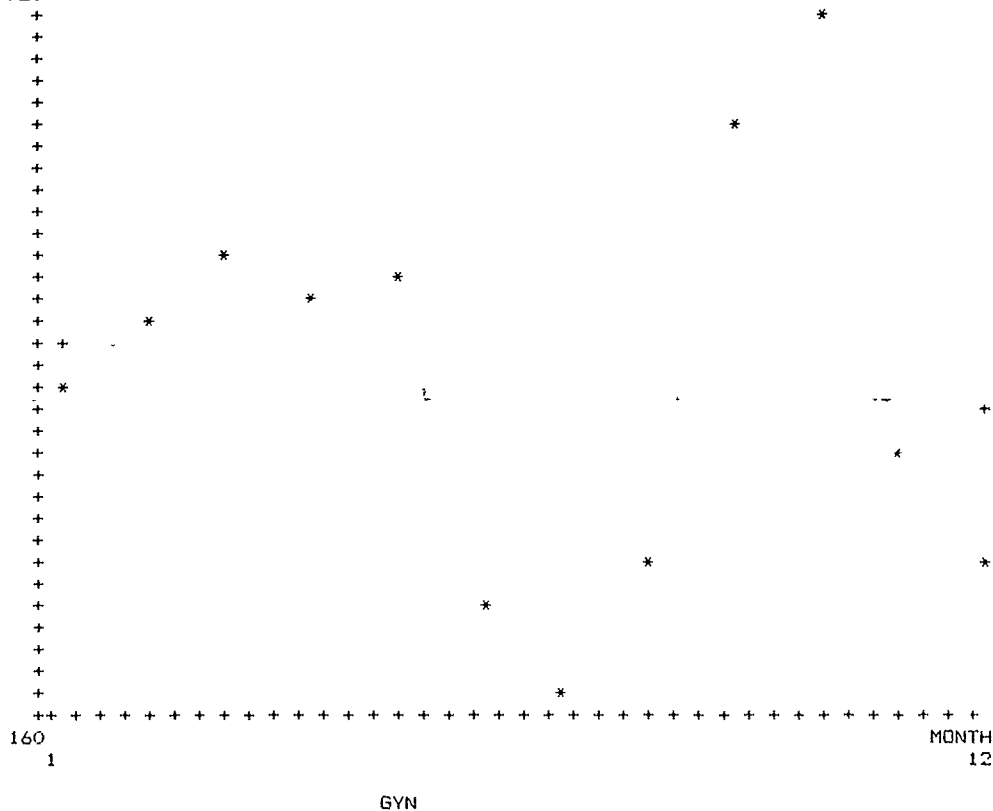
GYN

HEADER DATA FOR: A:PRODWORK.   LABEL: HOOTEN GMF 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by +'s on scatterplot):

INTERCEFT= 449.28787878788   SLOPE= -4.6853146853156

r = -.1013   r squared = .0103

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CLIN VIS
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459                                                                MONTH
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                              GYN


HEADER DATA FOR: A:PRODWORH      LABEL: HOOTEN GMF 90 US ARMY BAYLOR
NUMBER OF CASES: 72    NUMBER OF VARIABLES: 32


  REGRESSION EQUATION (Shown by +'s on scatterplot):

    INTERCEPT= 763.36363636364    SLOPE= -7.8636363636364

    r = -.2785   r squared =  .0775
```
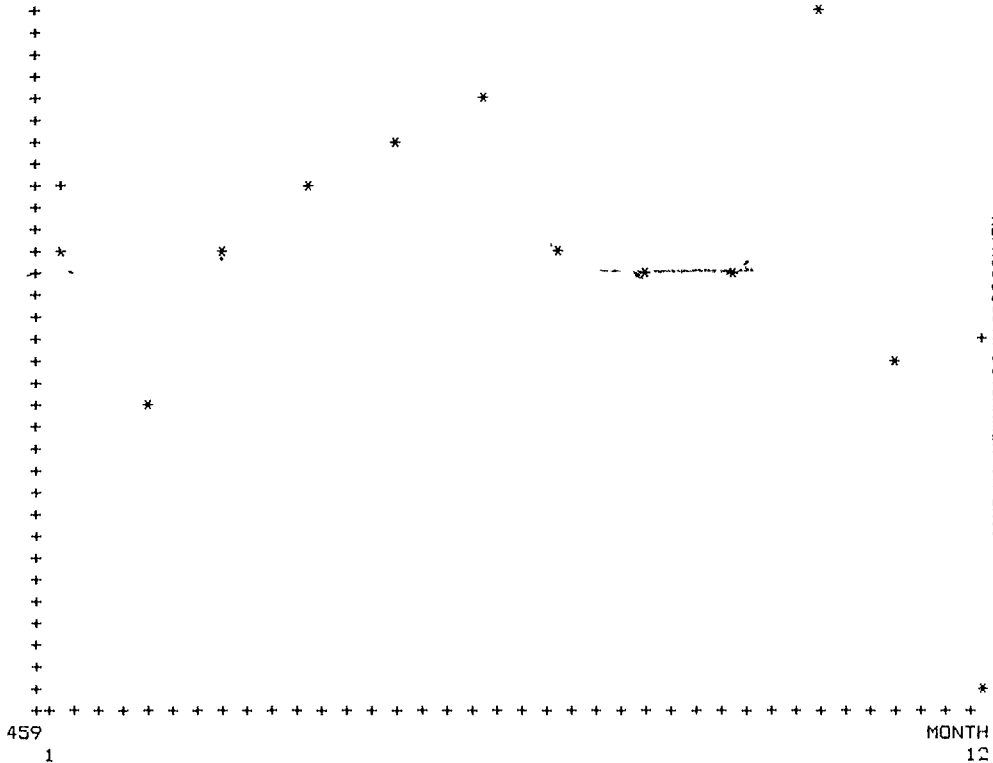
```
-------------------- DESCRIPTIVE STATISTICS --------------------

HEADER DATA FOR: A:PRODWORK    LABEL: HOOTEN GMF 1990
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 33


BEGINNING CASE NO. = 61, ENDING CASE NO. = 72
```
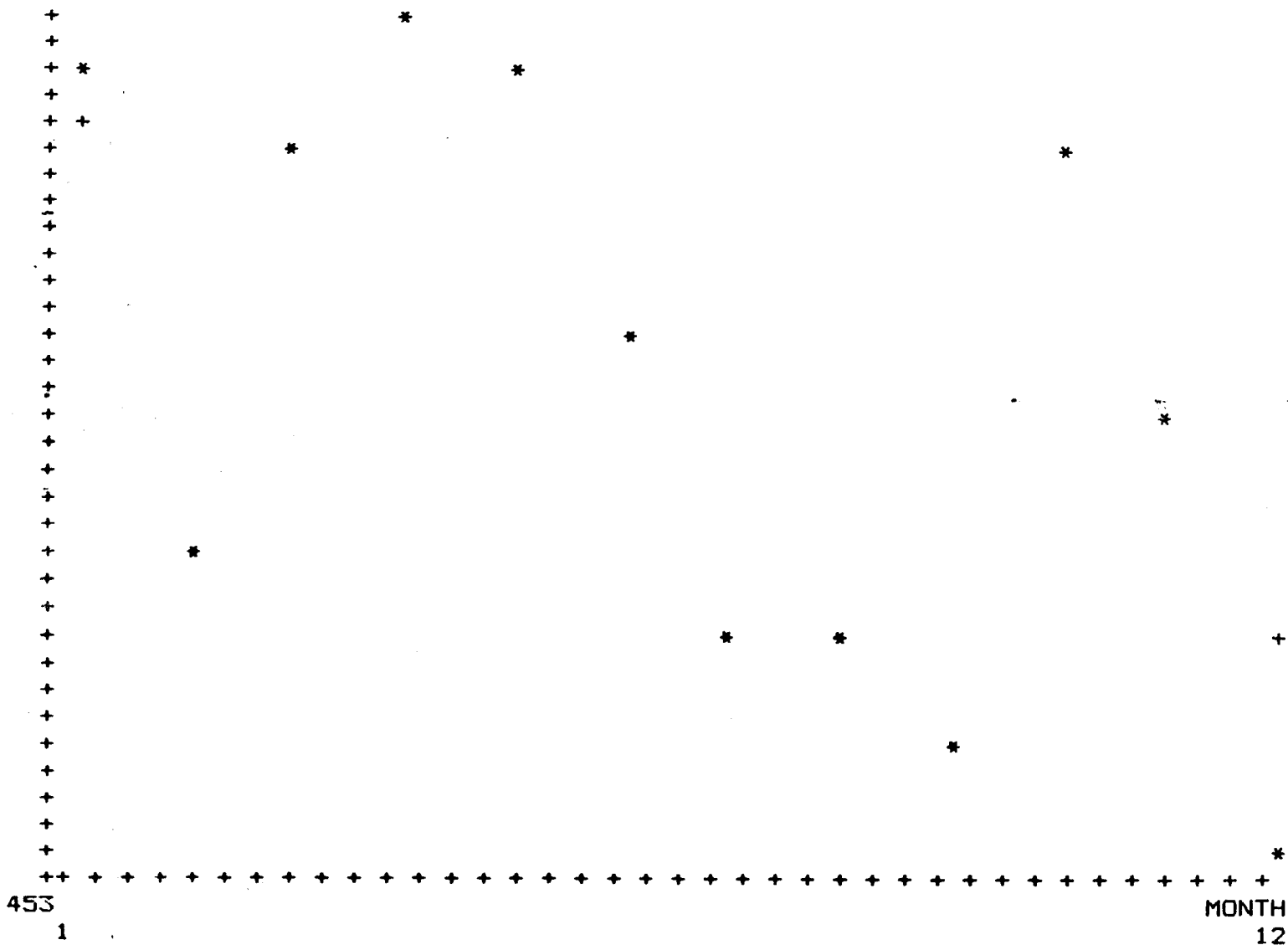
NO.	NAME	N	MEAN	STD. DEV.	MINIMUM	MAXIMUM
1	APPTS	12	267.0833	125.4443	145.0000	491.0000
2	WALK IN	11	307.2727	125.0305	85.0000	454.0000
3	TARGET	12	845.8333	180.2250	700.0000	1050.0000
4	CLIN VIS	12	547.3333	59.2626	453.0000	623.0000
5	CLIN HR	12	261.8333	24.4385	229.0000	321.0000
6	ER VISIT	12	2395.6667	206.0385	2123.0000	2823.0000
7	ER CONS	12	1.9167	1.8809	.0000	5.0000
8	AD	12	386.4167	73.5137	188.0000	472.0000
9	AD/D	12	144.4167	28.6466	95.0000	188.0000
10	RET	12	72.5000	14.0097	43.0000	96.0000
11	RET/D	12	101.6667	17.2117	59.0000	122.0000
12	N RET	12	12.0833	4.9992	5.0000	20.0000
13	N RETD	12	13.0833	2.4664	10.0000	17.0000
14	F AD	12	1.0833	1.5643	.0000	5.0000
15	F AD/D	12	2.2500	2.1373	.0000	6.0000
16	F RET	12	15.0000	3.8376	9.0000	23.0000
17	F RET/D	12	20.5833	6.5430	10.0000	29.0000
18	PHY ASGN	12	2.5000	.5222	2.0000	3.0000
19	PHY JUST	12	2.7667	1.0748	2.0000	5.0000
20	MED	12	.0000	.0000	.0000	.0000
21	PED	12	.0000	.0000	.0000	.0000
22	GOC	12	.0000	.0000	.0000	.0000
23	FPS	12	.0000	.0000	.0000	.0000
24	GYN	12	.0000	.0000	.0000	.0000
25	ORTHO	12	1.0000	.0000	1.0000	1.0000
26	PTCANC	12	15.2500	6.4685	6.0000	29.0000
27	CLINCANC	12	12.7500	15.8121	.0000	50.0000
28	WALK IN	12	22.1667	76.7876	.0000	266.0000
29	NS	12	16.6667	18.1175	.0000	65.0000
30	ADMISSIO	12	70.0833	13.2696	46.0000	95.0000
31	INPT HR	12	201.4167	27.3411	154.0000	261.0000
32	CLIN HR	12	261.8333	24.4385	229.0000	321.0000
33	CLIN VIS	12	547.3333	59.2626	453.0000	623.0000

CLIN VIS
623

453
1

MONTH
12

ORTHO

"REPRODUCED AT GOVERNMENT EXPENSE"

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
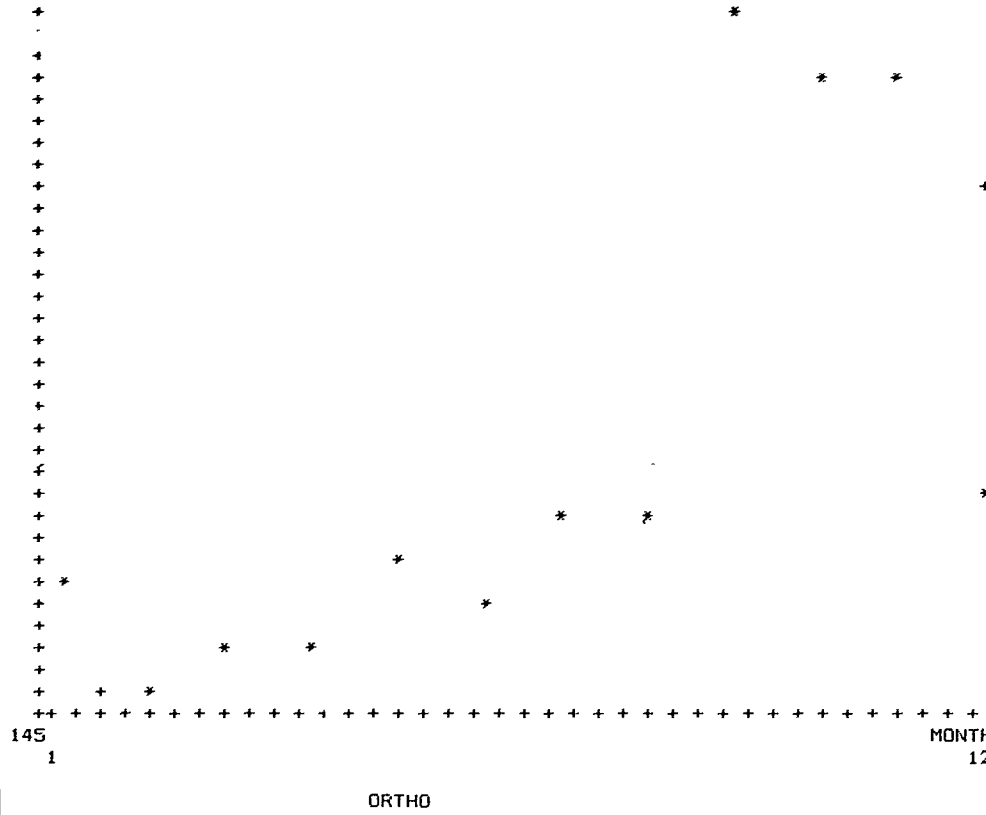NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 608.92424242424   SLOPE= -9.4755244755245

   r = -.5765   r squared = .3323

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145                                                              MONTH
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ORTHO

HEADER DATA FOR: A:PRODWORK   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
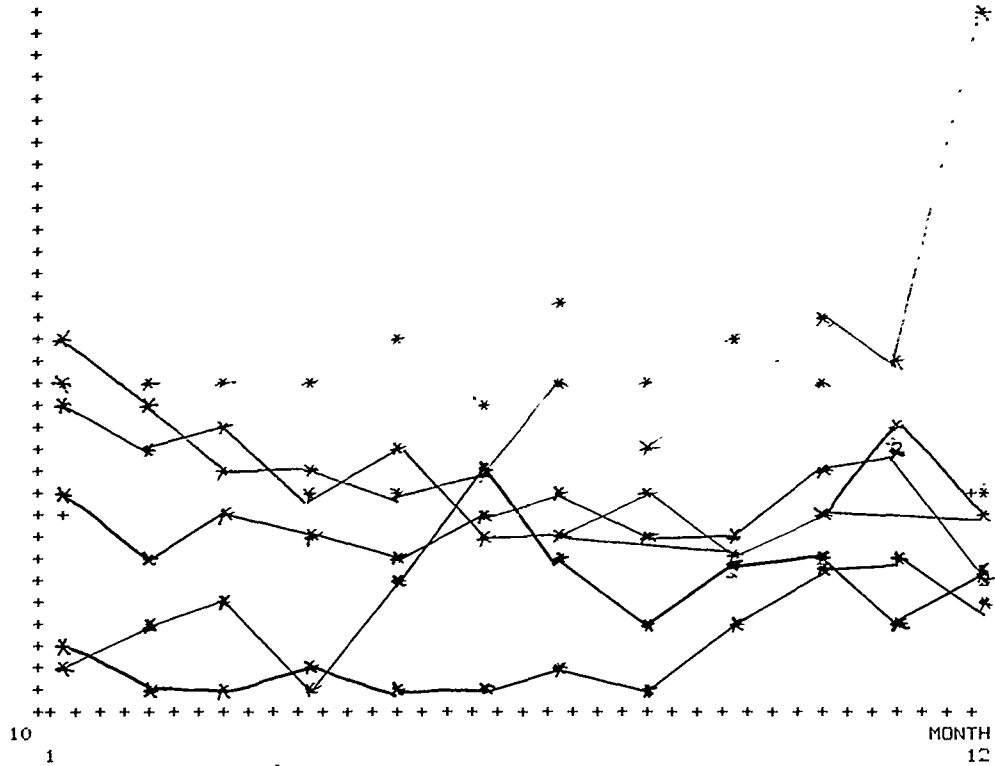NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

 REGRESSION EQUATION (Shown by +'s on scatterplot):

   INTERCEPT= 107.15151515151   SLOPE= 24.604895104896

   r = .7072   r squared = .5001

ADMISSIO

all clinics admissions cy 89

HEADER DATA FOR: A:PRODWORP   LABEL: HOOTEN GMP 90 US ARMY BAYLOR
NUMBER OF CASES: 72   NUMBER OF VARIABLES: 32

REGRESSION EQUATION (Shown by +'s on scatterplot):

  INTERCEPT= 68.626262626262   SLOPE= 1.1835664335664

  r = .0981   r squared = .0096