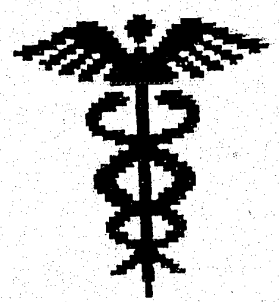
AN EVALUATION OF HEALTH CARE COSTS IN JAILS



by

Correctional Health Services
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FORWARD

The provision of health care in jails raises complex issues of costs and quality of care for Sheriffs and Jail Administrators. Health care within a detention system is generally a function of multiple agencies such as public health, city/county hospitals, privately contracted entities and departments of correction. It is difficult to separate and calculate true costs and in-kind costs of these services and compare for cost-effectiveness. It is not surprising for a sheriff or a jail administrator to find that they have insufficient information thus little control over their health care system and dollars.

In addition to burgeoning health care costs and increased inmate populations, jails must also confront nationwide nursing shortages, escalating salaries for technical medical personnel, the AIDS epidemic, new legislation, heightened regulations and standards of care.

In the past 10 years jail health care services have literally transformed from basic emergency maintenance to complex and comprehensive total care including ancillary services such as dental, orthopedic, prenatal, and inpatient-convalescent care.

In many cities, jails have become the caretakers in the community. People are in agreement around the country that many repeat offenders, chronic, homeless, and transients rely upon the jail systems to deliver their babies, cure their infections, perform their operations, provide dental care and stabilize their seriously mentally ill. The jails have been and are medical shelters and barometers by which we judge the level of caring and compassion.

This grant study was initiated to identify cost effective components of nationally accredited health care systems throughout the country. The grant project objectives were to:

1. Conduct seven site visits to compare correctional health care systems and gather data.

2. Identify medical management practices and delivery systems that can serve as guidelines for correctional health and detention administrators. It is intended that this grant product will provide the tools and strategies to conduct a cost evaluation of health care systems providing standard levels of care.

INTRODUCTION

The Maricopa County Health Department through an Interagency agreement with the Sheriff's Office provides medical care throughout the Detention Facilities. Correctional Health Services has managed the medical and psychiatric care of 4,500 jail inmates for more than a decade. For almost as long, Correctional Health Services has maintained accreditation through the National Commission on Correctional Health Care (NCCHC). The NCCHC has developed guidelines and standards which promote acceptable levels of care. The American Correctional Association has also established similar health care guidelines for jails. These standards have become an acceptable measure against which the courts may base judgments for appropriate levels of care. Accredited health care was initiated and mandated by a federal consent decree for the Maricopa County Sheriff's Office, which is not unlike many jail systems throughout the country today.

Can jails afford to continue meeting these standards or can they afford not to? What level of health care is acceptable for inmates? Many elected officials, public citizens and administrators would argue that inmates deserve the least tax dollars. Yet rising health care costs and prison and jail construction have earmarked the lion's share of dwindling budget dollars. State and local governments are forced to curtail health care services to the general public. They are forced to restrict specific levels of care,

abolish former services and establish cutoff criteria for the law abiding citizen who is too poor to pay for private medical care. Yet in the jail setting, care cannot be restricted due to cost factors. Legally it is risky to restrict or delay certain treatments such as kidney dialysis, AZT treatment for AIDS or prenatal care due to costs.

The courts constitutionally guarantee an inmate's right to health care and proper treatment as determined by the community standard of care. Although philosophically strong disagreement may exist, one cannot argue nor avoid the responsibility and obligation of increased health care costs within the jails.

The country has experienced a nationwide nursing shortage along with scarce availability of various medical technicians and specialists. Jails have the compounded problems of attracting and retaining competent medical personnel within an unfavorable environment.

Who decides what level of care is adequate and at what cost? The health care Administrator is responsible to monitor and oversee daily operations; the clinical team to ensure on-going standards and levels of care. There are many approaches to determining levels of care and costs. Your system may be driven by dollars or profit, or by an overriding fear of litigation. **Profit does not necessarily negate good care and more dollars does not necessarily mean better quality of care.**

A Correctional Health Care System, which is clinically driven, without administrative cost-controls and systematic monitoring, is likely to be on a budgetary collision course. A balanced blend of both administrative and clinical measures is needed. A systematic plan of cost-containment, fiscal review, utilization review and quality assurance is essential. The jail health care systems reviewed in the grant project ranged from sophisticated budgetary monitoring controls to limited planning and poor accountability for health care costs.

The goal of this grant study and resultant guidelines is to help organize areas of health care expenditures, identify some hidden costs and enable you to develop your own internal structural controls of on-going monitoring and review. The study consisted of site visits, interviews and data collection to seven accredited jail medical programs both public and private. Correctional Health Services staff in teams of two, conducted the jail health surveys based upon pre-designed survey questionnaires. *(See Survey Questionnaire in Appendix)* The methodology of collecting program and budgetary data was consistently applied to ensure analysis of comparable services, staffing and costs. Controlled data collection of these areas was a difficult task and not entirely accomplished. Distinctions and variations were found among all areas in levels of care, staffing patterns, and operational budgets. It was equally difficult to account accurately for the many hidden costs and in-kind services which were not formally budgeted nor tracked. Cost factors were in some cases sensitive, and confidential areas were not disclosed. The survey data collection focused on areas

of Nursing, Pharmacy and Health Services Administration. Due to the limited scope of the grant project, psychiatric care was not included in the study. Any costs for mental health or psychiatric services have been omitted. The study of mental health treatment and costs in jails is one deserving of a separate and distinct project for comprehensive data collection and analysis.

Specific information and comparisons obtained throughout the study will not identify particular agencies or locations. In order to ensure the confidentiality and much appreciated frankness and openness offered by several systems, the report will refer to locations A-H.

It is our hope that this report will prove to be of assistance to jail professionals and their colleagues in the field of correctional health services.

I. GENERAL ADMINISTRATION/ORGANIZATION

The seven sites were reviewed comparatively, with Maricopa County Sheriff's Office (MCSO) as the control. All sites were nationally accredited, some included statewide certification. The sites were large urban jail systems representing the East Coast, Midwest and Northwest and Western sections of the Country.

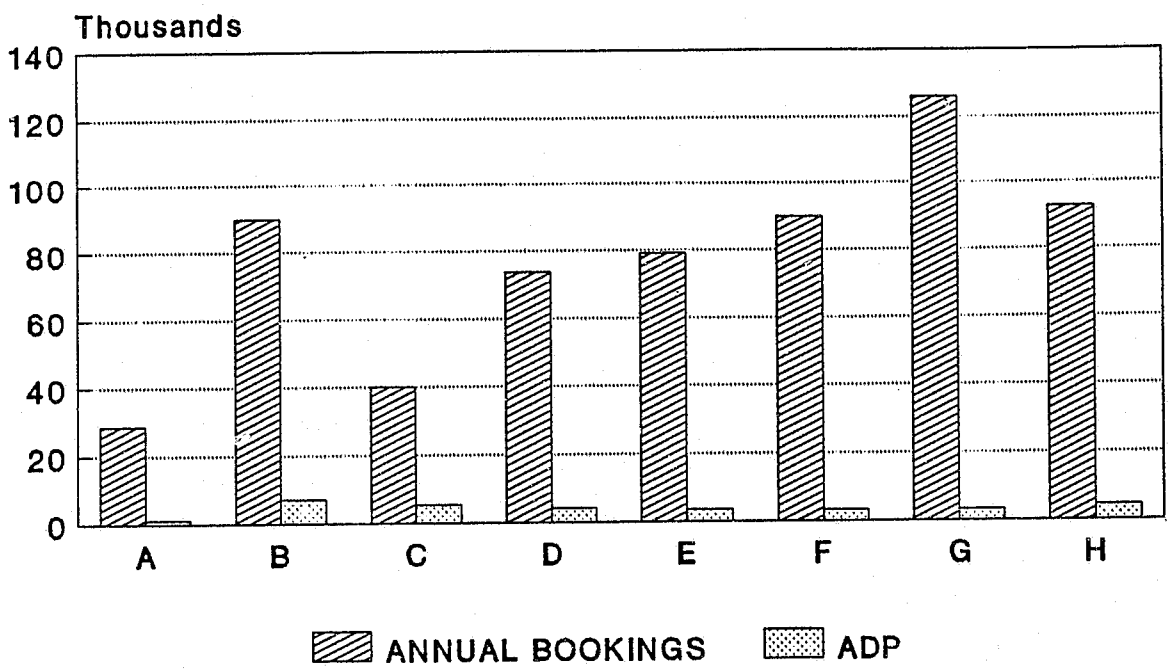
Of the seven sites:

- Four sites were public; i.e., medical services provided by either County Health Departments, Sheriff's Office or a combination of both.

- Three were privately contracted services.

- The inmate population of the jails ranged from an ADP of 1116 to 7000, *(See Table 1)*. The internal management structure varied considerably. Approximately half of the health care systems were managed by non-medical administrators. The remainder were nurse managed systems with an RN as the health administrator and subordinate nurse managers. The levels of fiscal responsibility and managerial autonomy varied widely.

TABLE 1
ANNUAL BOOKINGS VS. AVERAGE DAILY POPULATION



On-site administrators had the least amount of fiscal control in the privately operated systems. Budget planning, decision making and expenditure authority was conducted at the corporate level.

- Most clinical decisions in the privately operated systems involving outside care at hospitals or specialty clinics required corporate office authorization. Public system administrators had greater latitude and responsibility for overall management, organization and planning, but did have the usual complaint of bureaucratic delays in funding and recruitment.

- Integration within the Sheriff's Office or Department of Corrections utilized several models:

  A. Three sites: Sheriff delegated medical responsibility or worked in cooperation with County Health Departments. Medical staff were non-correctional civil service employees. The sheriff appointed a monitor or liaison to work closely with the Health Administrator.

  B. One site: Medical staff were directly employed by the Sheriff and managed by a sheriff's health administrator.

  C. Three sites: Medical staff were contracted by private companies. Health care was monitored by either a sheriff's staff or representative from the County or City Health Department.

One model employing health care staff as direct employees of the sheriff appeared to maintain integrated services and a close working relationship with Detention. However, this model was the exception as the majority of correctional health systems were part of a public or private health organization. Most correctional health systems had developed reasonably good working relationships with the correctional agencies, thus, no major problems were observed which impeded the functioning or delivery of health care.

One could argue logically that jails are a separate discipline and are not in the business of health care. Well managed health care requires the expertise of a complete structured level of support provided by community health departments and/or Hospitals. Health care planning, budgeting, recruiting, credentialing, quality assurance, peer review, neutrality and autonomy are best approached from an established health care perspective and understanding.

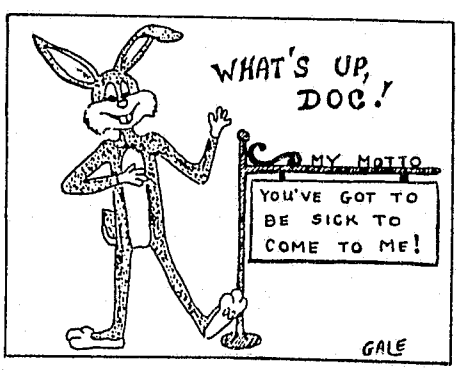
Most of the jails studied had appointed a Detention Liaison who appeared to be at a disadvantage to evaluate health costs due to lack of total access to information or being on the "side lines". Several liaisons were observed to be in rather ambiguous positions with poorly defined responsibility and authority. It was difficult at best to determine the roles and effectiveness of the appointed liaisons. The liaison positions were separate and distinct from the Correctional Health Administrator.

INTEGRATION OF MEDICAL AND CUSTODY

The relationship between the Correctional Health Administrator and Jail Administration, Sheriff or Liaison is critical for smooth and efficient operation. Conflicts are not uncommon between medical and security personnel; there are philosophical differences and potentially incompatible standards. Open, honest communication with a high level of professional

integrity and trust is essential. The Health Administration is the focal point to assure that the interworkings between Detention and Medical allow for cost effective operations. Barriers such as inadequate clinic space, limited inmate holding cells, insufficient data resources and inefficient inmate escort impact health care costs. The Health Administration must attempt to resolve problems promptly with Detention and establish formal negotiation mechanisms. Detention interference with inmate health care and poor cooperation will impact its cost and efficiency.

The Administrator should evaluate day-to-day practices which are not of a medical nature, yet imposed upon the medical staff. Are there staff hours spent distributing items which could be handled through commissary or seeing manipulative inmates or behavioral problems which should be handled by Detention? There is a direct correlation of inmate assaults to overcrowding, inmate idleness, lack of programs, education and recreation. Without proper management and support, medical sick call can become a costly form of recreation. Informational access to inmate tracking and movement is of the utmost importance for efficiency and continuity of care.



II. COSTS - CONTROLLING HEALTH CARE EXPENDITURES IN JAILS

Rising costs in medical care for jails can be attributed to several factors such as increased litigation and court intervention, rise in the national cost of health care and jail population growth. Health care expenditures in jails continue to absorb an increasing part of jail operational costs each year. A study reflecting these increases was completed last year by the California State Board of Corrections and the California State Sheriff's Association entitled "Jail Health Services: New Fiscal Black Hole". County Spectrum California Counties Foundation Records Division July/August 1990. As correctional expenditures continue to rise, so will correctional health care accordingly.

As stated earlier, comparisons, other than broad summary conclusions, were difficult due to the diversity of in-kind costs and non-chargeable services within the county systems.

Jails have taken steps to control health care costs through various proactive measures. Accreditation ensures an acceptable standard of health care that will limit and often prevent costly dollars spent in litigation and damages. Private contracting of health care may in some cases reduce costs or at least provide systematic fiscal control and accountability. Facility planning and centralizing

medical care can reduce costs tremendously by requiring less medical staff and equipment and duplication of services through multiple jail sites. On-site provision of care is expanding in most large jail systems which can justify by volume, on-site specialty clinics. There is dual benefit by treating an inmate on-site, through mobile portable equipment or cooperative arrangements with the medical community by reducing the inmate transportation burden, fewer delays in scheduling, and less security risk to the community.

Cost containment includes tracking, monitoring, utilization review, budget planning, negotiated rates, and overall controlled spending.

> **Medical costs at each site were very difficult to determine. No two systems calculated exact cost areas similarly nor were any able to provide inclusive budgets for the various medical components.**

Generally, the overall total medical budget was misleading due to various in-kind costs, caps or deductibles for hospitalization and outside medical care. Several systems had no formal tracking mechanisms in place. The majority of systems received free components of health care due to working within the totality of the city or county. Medical cost comparisons were difficult to determine, not only due to various levels of care but the diversity of budgetary methods. Examples

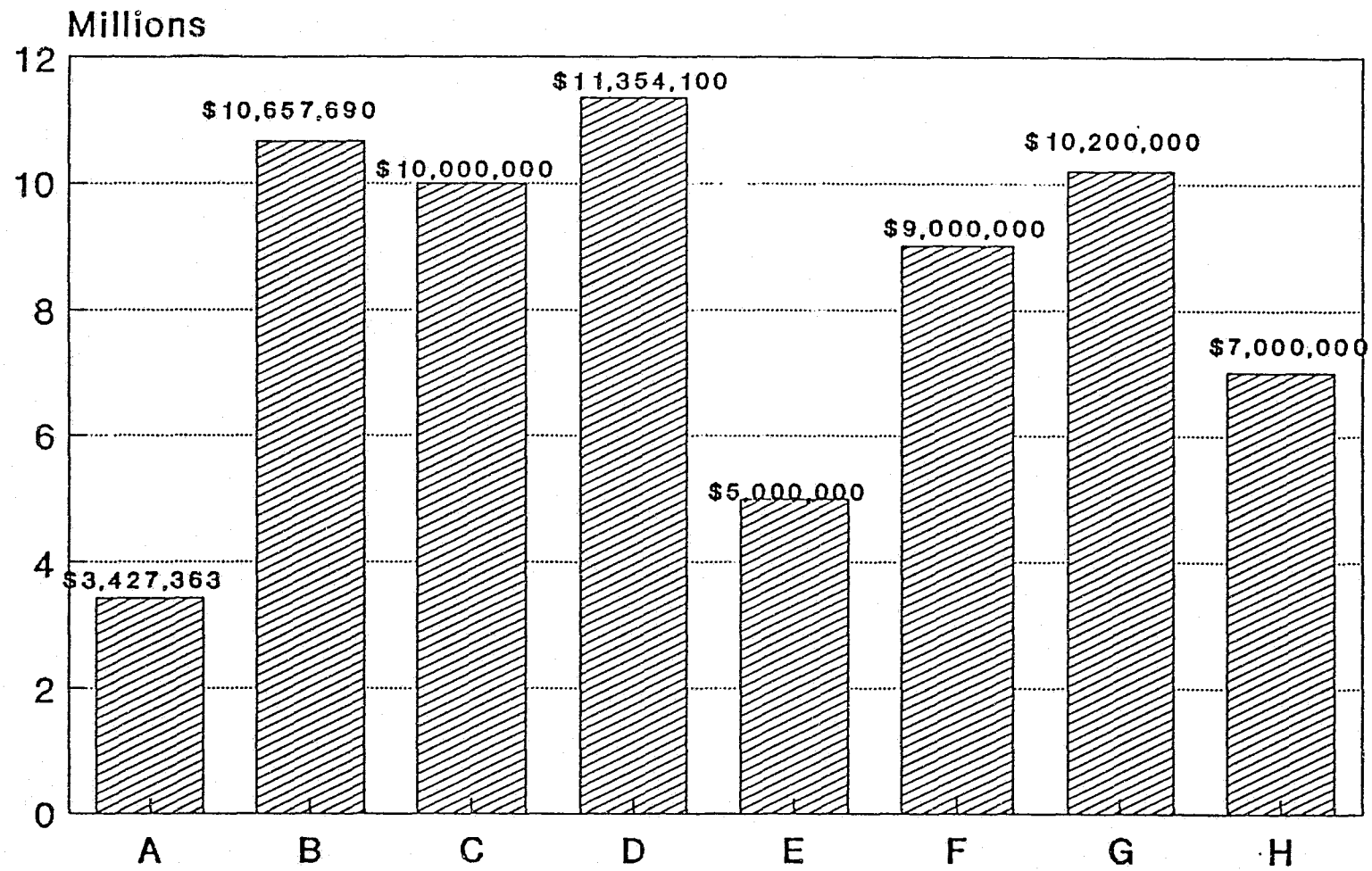
of combined county budgets included free pharmacy staff and services, no charge for outside hospitalization, specialty clinics, lab or x-ray services or professional fees. Several systems direct billed patients and insurance companies to recover medical costs. Similarities were found in comparing the budgetary components of personnel costs, some pharmacy costs, and hospitalization. *Table 2* depicts overall medical costs and the various component breakdown.

One note regarding cost comparisons: total overall medical costs cannot be computed by ADP (average daily population) alone. *Tables 3* and *4* shows the diverse relationship of ADP to annual bookings and calculated costs.

It is important to keep in mind that medical services must extend to all incoming inmates, thus medical care may be costly for those inmates who remain only 24-48 hours after booking and are never reflected in the ADP.

Jails that receive inmates directly from the streets without the benefit of prior emergency care or detoxification must reflect these costs in their annual budget. The length of stay and the release rate will equally impact medical costs.

TABLE 2
MEDICAL COSTS BY FACILITY



These figures show exclusive medical costs only and do not reflect mental health care costs.

TABLE 2A
MEDICAL COSTS BY FACILITY

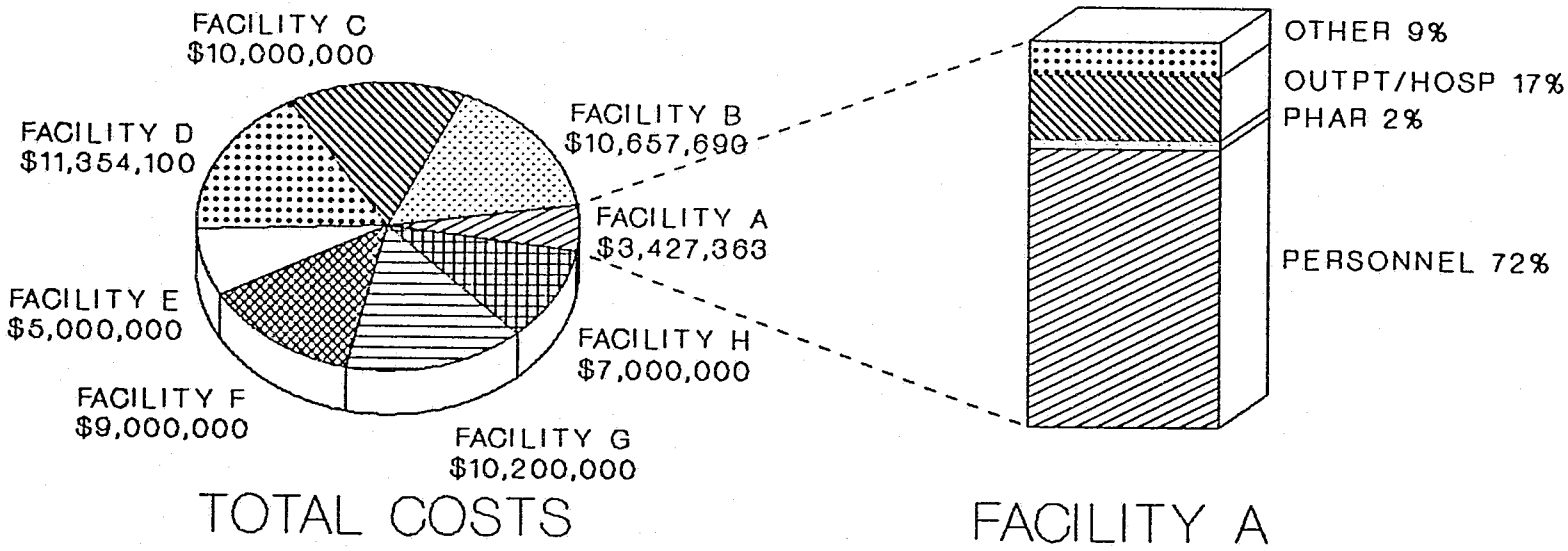
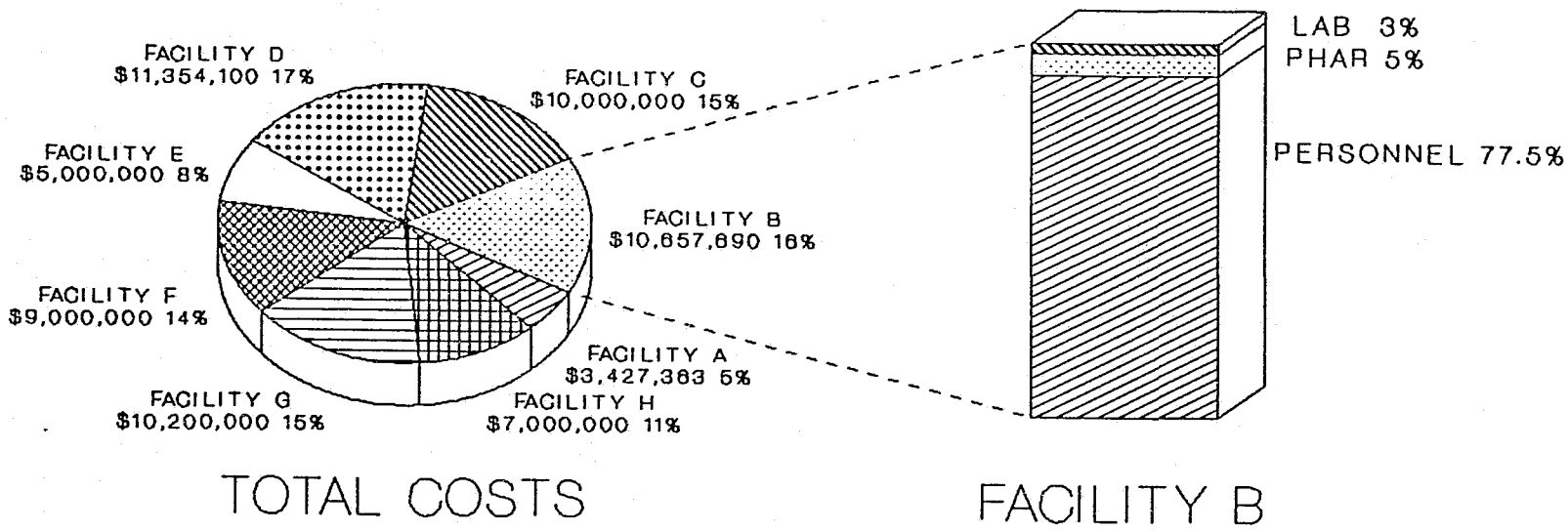


TABLE 2B
MEDICAL COSTS BY FACILITY



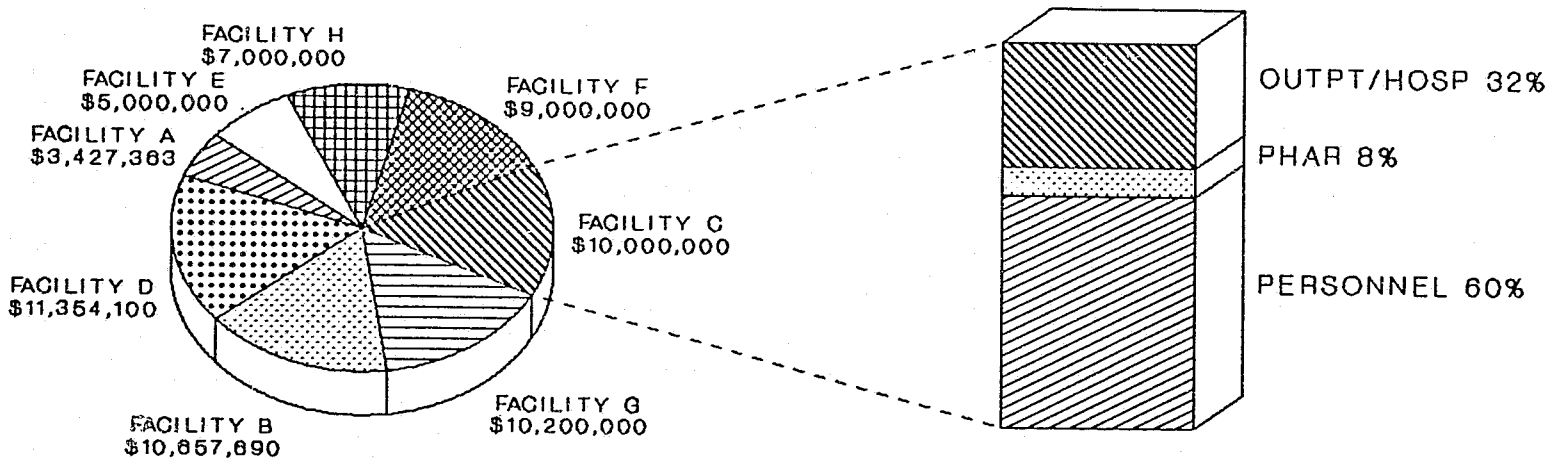
TOTAL COSTS

FACILITY B

OTHER = 14.5%

NB: No hospital costs were charged to the jail

TABLE 2C
MEDICAL COSTS BY FACILITY



TOTAL COSTS

FACILITY C

TABLE 2D
MEDICAL COSTS BY FACILITY

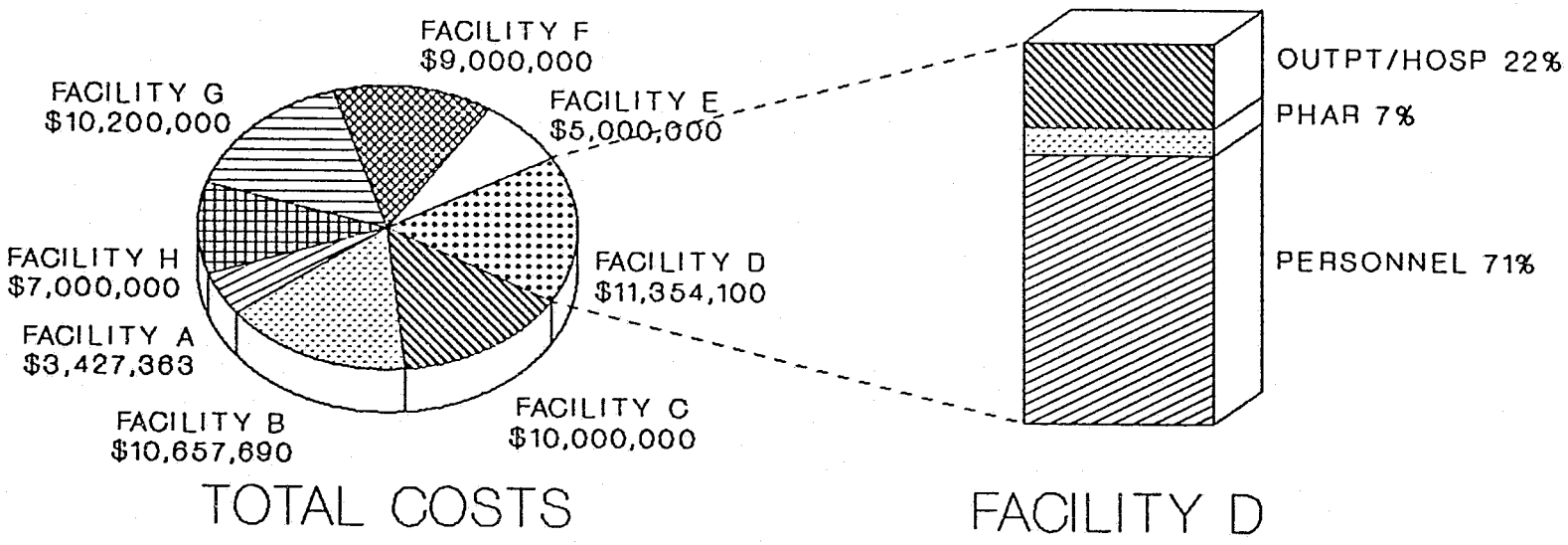
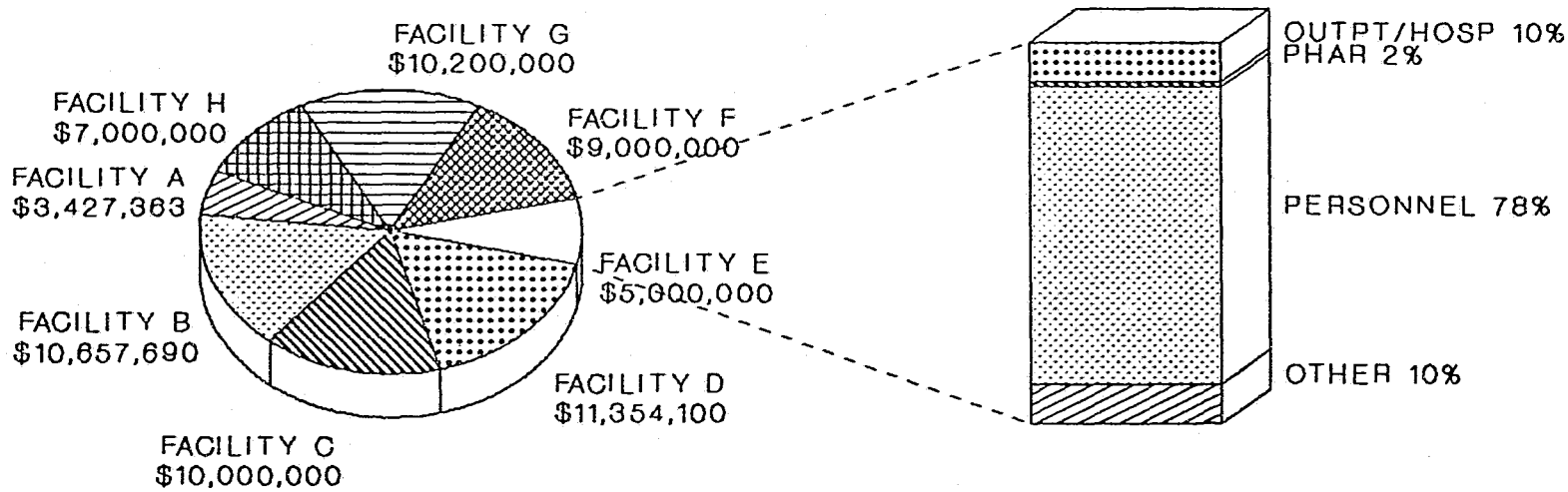


TABLE 2E
MEDICAL COSTS BY FACILITY



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FOR FACILITY F

TABLE 2G
MEDICAL COSTS BY FACILITY

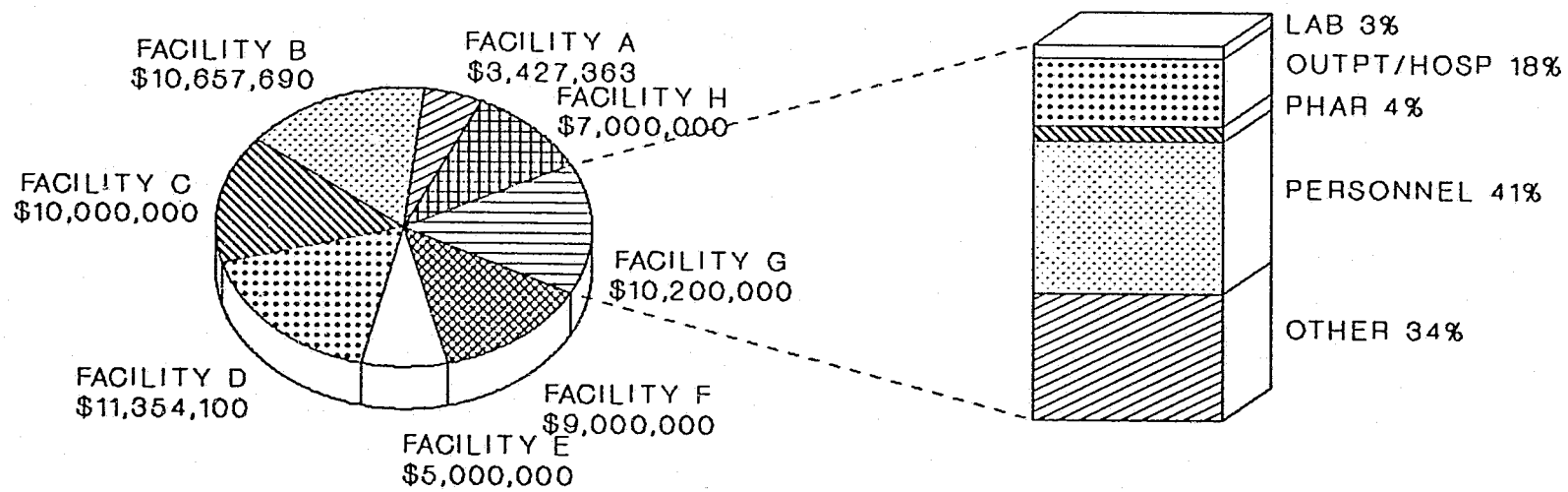


TABLE 2H
MEDICAL COSTS BY FACILITY

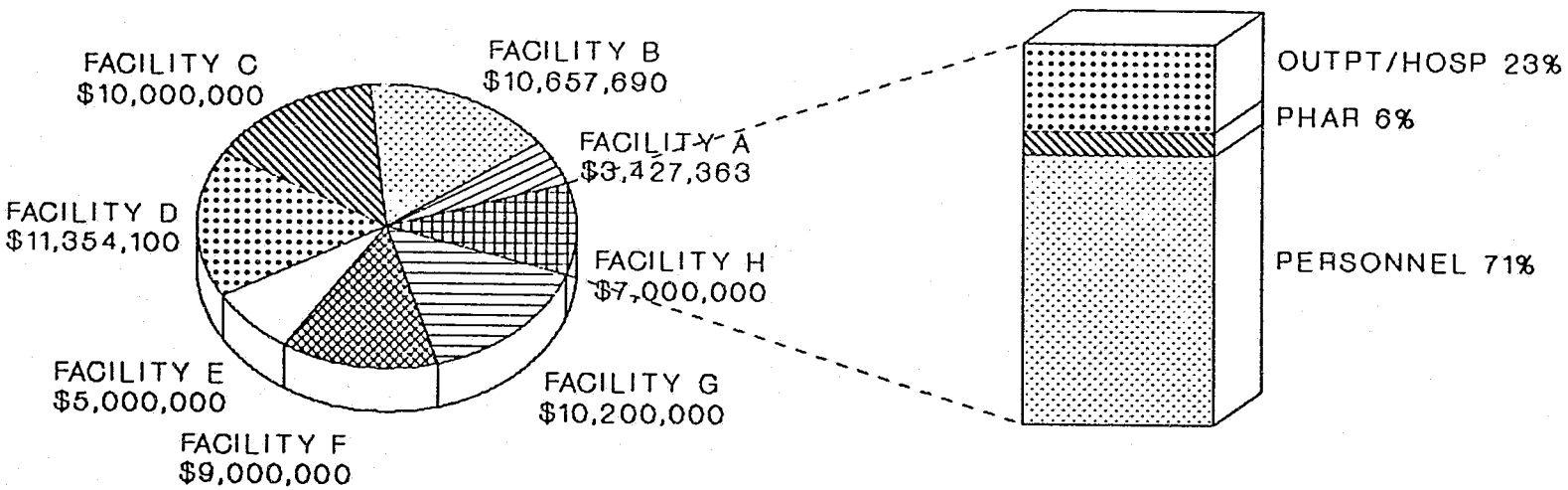
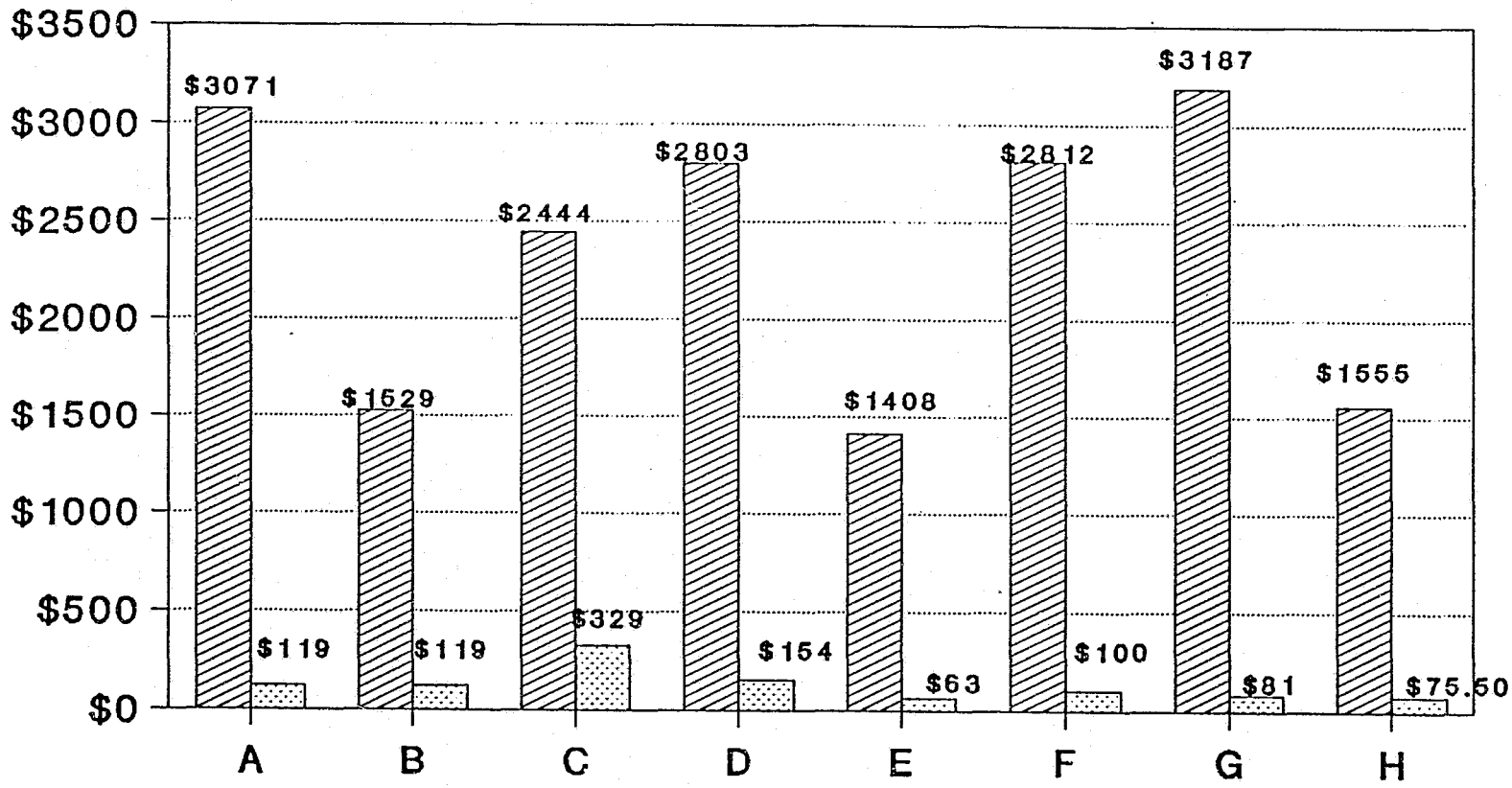


TABLE 3
ANNUAL COST PER INMATE



Comparisons of medical costs
were difficult due to
-Varying levels of service
-in-kind services at no cost to jail
-various strategies of budgeting and accounting
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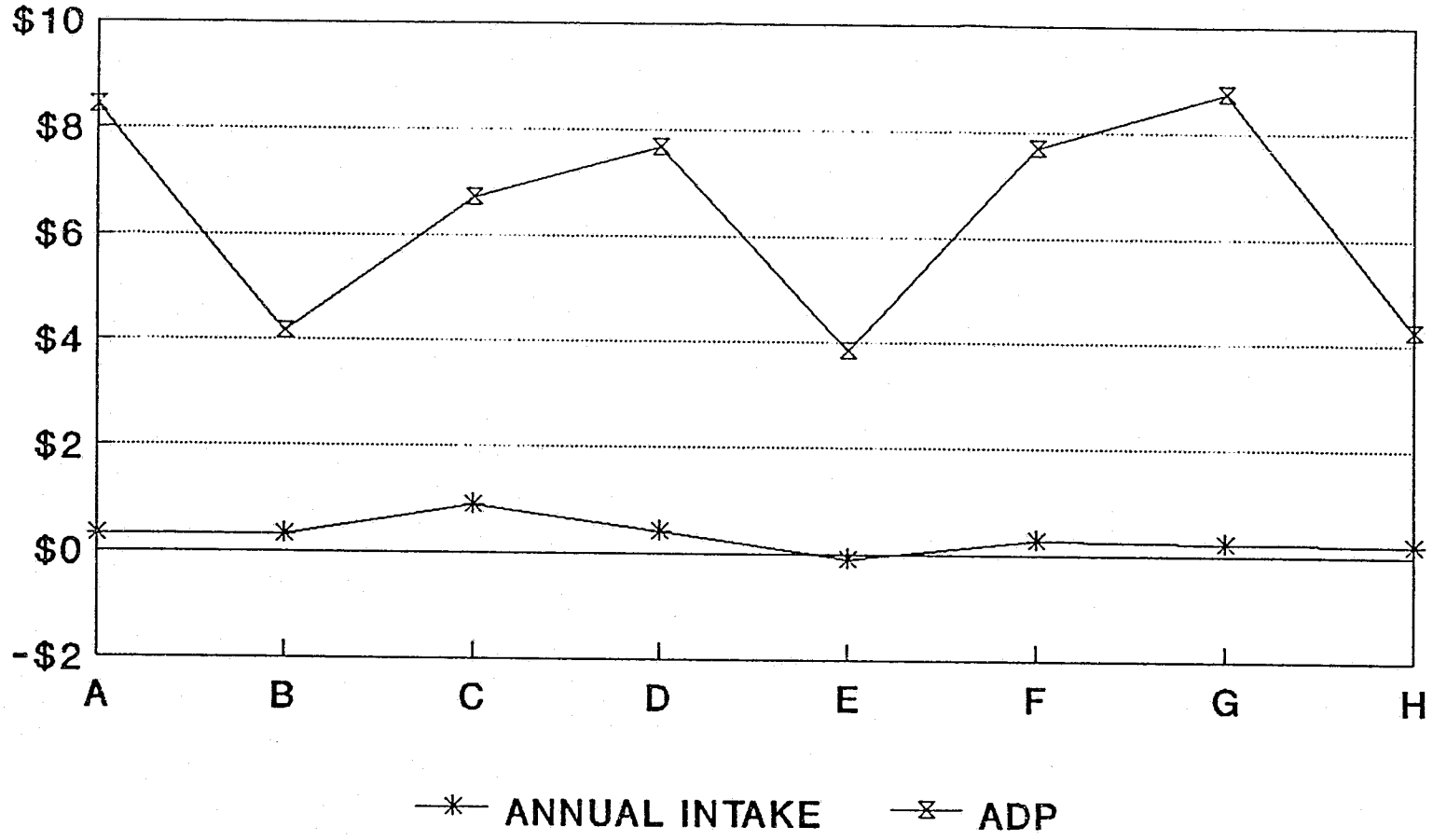
TABLE 4

CALCULATED COSTS OF MED. CARE BASED UPON ANNUAL INTAKE & AVERAGE DAILY POPULATION

Daily Cost Per Inmate

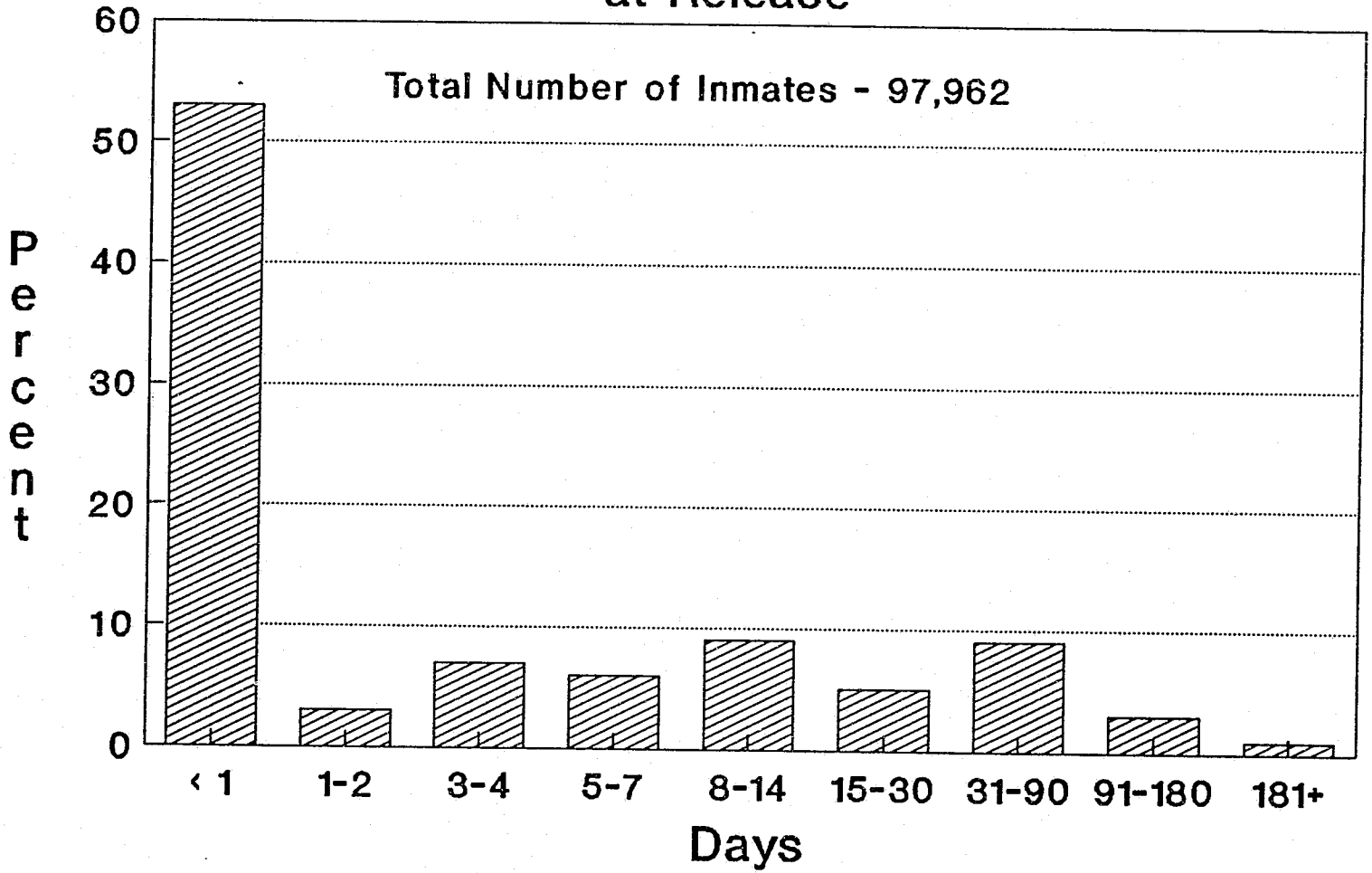


In Maricopa County the release rate has played an important role in determining when services are offered *(see Table 5)*. Release rate should also be considered when you are deciding an appropriate time at which to initiate physical exams or continued medical treatment. Regional demographics and local community resources will impact your health care costs. California personnel costs were among the highest. Large percentages of transient and homeless populations in cities may affect jail health care costs depending upon the arrest practices of the local law enforcement agencies. Traditionally the sun belt areas have born the burden of these increased costs in health care. However, the financial impact was evident among all large urban areas. Other factors influencing budgets include requirements of State Boards such as Nursing and Pharmacy as well as court ordered levels of care. As an example, MCSO is court ordered to provide medication administration by unit dose. The Arizona Nurse Practice Act prevents LPN's from conducting many of the services which were provided in other states at that nursing level, thus requiring a heavier concentration of RN's.

Another significant impact upon health care costs is the required number of 24-hour clinics or medical stations. Several of the jail systems studied utilized cost effective centralized medical services.

Centralized medical services provide the most efficient and cost effective operation.

TABLE 5
MARICOPA COUNTY
Inmate Incarceration Time Distribution at Release



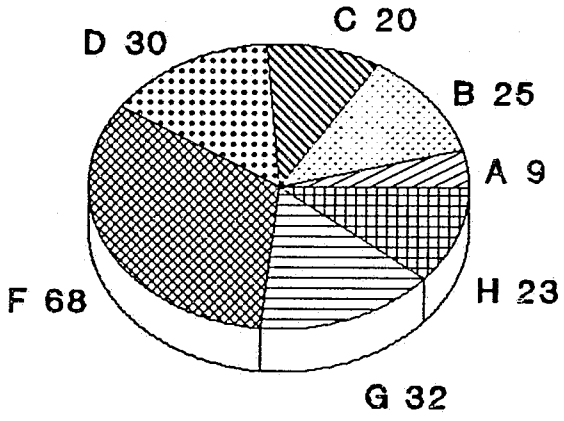
It requires long term, wide-range planning to coordinate the needs of security and medical. The type of facility, including physical space and accessibility will determine the ability to coordinate several components such as x-ray, dental, medical records and pharmacy. For example, centralized intake services would enhance provider availability, access to medical records and comprehensive services. Multiple booking sites will require duplicate medical services and escalate costs. Cook County was an excellent example of long term planning with coordinated and centralized medical services, maximizing resources and reducing costs. The physical structure of the facilities varied greatly among the jails from 100 year old facilities to new modern structures. Physical limitations were inherent but not prohibitive to health care delivery.

IN-PATIENT SERVICES/OFF-SITE COSTS

The number of in-jail infirmary beds varied considerably; it was not possible to determine any impact on overall hospitalization costs. As shown on *Table 6* there was no correlation of infirmary jail beds to annual hospitalizations fees.

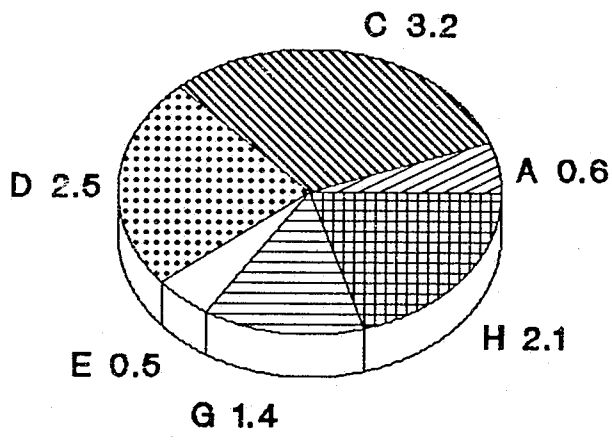
This was due in part to the operational differences of each county such as negotiated hospital rates, in-kind, cooperative budgeting within the county and agreements with health departments to absorb all hospitalization costs.

TABLE 6



Number of In-Patient Beds

In-patient infirmary medical beds
Site E had no infirmary beds
(DOES NOT include Psych beds)



Hospital Costs
(millions)

Site B and F could not provide outside hospitalization costs.

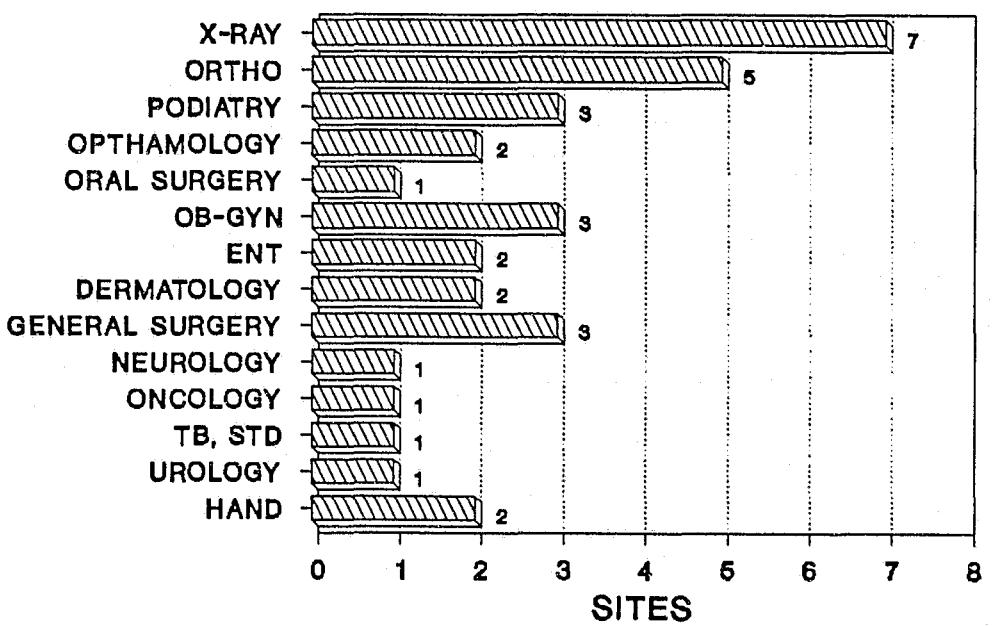
One evident factor throughout the jail sites was the need to expand infirmary beds for flexible housing and medical needs. Three sites were either close to opening new infirmaries or expanding bed capacity based upon the needs of the inmate population for convalescent care.

On-site inpatient care, however limited in scope of treatment and number of beds, should favorably impact overall hospitalization options and costs. Utilization of on-site infirmary beds included post-op patients with I.V.'s, communicable disease, respiratory, cardiac problems, diabetes, high blood pressure, wired jaws, quadriplegics and symptomatic HIV. One site listed an increased use of infirmary beds for geriatric patients. Approximately half of the jail infirmaries had installed negative air flow rooms to decrease the risk of communicable diseases. Admission into the infirmaries was generally by MD authorization only.

All jails reviewed except one had access to on-site x-ray services. Generally these services were available daytime Monday through Friday. X-rays were generally performed by a technician and read by a contracted Radiologist. Lab services were similar in that basic blood draws, HCT, and microscopic UA were conducted in-house. The jail systems utilized outside laboratory services for the bulk of tests.

Most jails had regularly scheduled on-site clinics reducing the need for outside transportation. Outside transportation was thus limited to after hour emergencies and serious medical needs. Depending upon the volume and need, clinics ranged from daily, weekly or biweekly schedules which minimized security and transportation risks and provided for efficient operations and timely treatment. Table 7, indicates the on-site specialty clinics which were utilized regularly.

TABLE 7
ON-SITE SPECIALTY CLINICS



BILLING ISSUES

In order to obtain information regarding the billing, tracking and monitoring of health care costs, interviews were conducted with the Health Care Administrators or their designees. Some of the health care administrators were very reluctant to provide budgetary information, therefore, the information may be somewhat skewed.

A major area of interest was systematic cost containment practices. As is evident, health care costs are rising and it is becoming more and more difficult to keep costs down. Maintaining a low budget may impact the services that are provided to the inmates. Therefore, to effectively "juggle" not only the quality of care provided, but the restraints placed upon funds is a large task. This most difficult task usually falls upon the Health Care Administrator.

Correctional Health Care is consuming an increasing portion of the total jail operational budget. Management of the correctional health care budget is usually completed by the on-site Health Care Administrator. Due to the increasing costs

for health care one might think that **all** health care administrators would stringently monitor costs and maintain an established billing department. **The costs for services provided by "outside" entities were not monitored by two of the eight sites.** The majority of sites functioned with some type of billing system, however, the thoroughness of the billing and tracking varied widely. Thus, it was difficult to establish a baseline mechanism of billing, tracking, and monitoring of hospital and ambulance costs to compare health care systems. A general summary of each systems' billing mechanism or lack thereof is listed below:

Site A: This facility contracts with a local hospital.

The inmate was responsible for all costs incurred from hospitalization or specialty clinics. Collection was initiated by the hospital, which billed inmates' insurance companies or the inmate directly, if uninsured. If the collection efforts of the hospital were unsuccessful, the hospital submitted a bill to the jail with proof of their attempts to collect. The billing clerk at the jail would then verify that the inmate was in custody at the time of the services and submit a letter from the Sheriff's Office stating the inmate's responsibility to pay. Only after all reasonable efforts to collect had failed did the facility pay the bill.

General transportation services were provided from internal resources. Ambulance services were utilized if the situation was life threatening, the patient was unstable or required immediate transport. Billing for these services were treated in the same manner as those listed above.

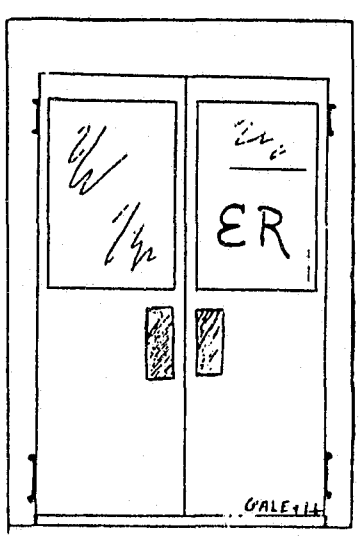
Site B: Minimal budgetary information was provided regarding billing and fiscal accountability.

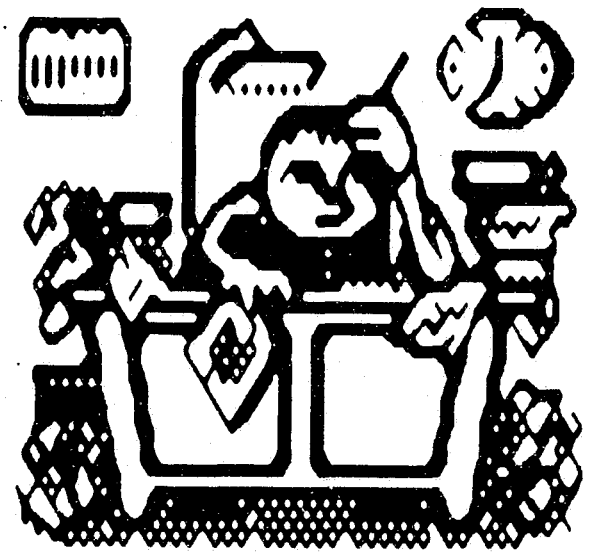
Specialty clinics, emergency care and hospitalization were provided by the County Hospital at no cost to the site or the Sheriff's Office. Therefore there was no tracking of the charge-back process. Comprehensive services such as hospitalization, x-ray, and lab were provided with no charges to the Sheriff. External contracts were limited to ambulance services in the event that there were two disasters at the same time. Due to this arrangement, there was no billing or tracking system in place. The facility maintained its own Basic Life Support Ambulance to transport inmates, with on-site detention staff and medical staff accompanying the patient. No budgeted dollars were indicated for the infrequent use of outside ambulance transportation. Off-site transportation for routine services was minimal due to the strong utilization of on-site specialty clinics. The costs for ambulance services were not reviewed or tracked in any manner.

Site C: Was a privately contracted health care system. All billing was completed by a private contractor. All services were contracted out. As an example, $3 million dollars was paid annually to the contract hospital regardless of the number of patients. However, no additional professional fees were billed. This system was in need of a billing, tracking and monitoring system to account for the health care costs incurred.

Ambulance services were paid by the local government and therefore were not a part of the this site's budget or responsibility.

Site D: Specialty clinics, emergency care, and hospitalization were provided by the County Hospital at no cost to the site or the Sheriff's Office. Because of this arrangement, there was no billing or tracking system in place. However, this facility was in the process of establishing a billing and tracking system to monitor their increasing health care costs.





The practice of "no charge back" to the correctional medical system was a result of a close working relationship with the county hospital and correctional medical staff. This type of working relationship also provided for strong continuity of care for the inmates.

This site had control over only 20% of the ambulance transportation costs. This 20% of the costs was a direct result of the jail's request for transportation. The remaining 80% was a result of requests from various police departments. As an example: law enforcement officers from one of the surrounding cities initiated ambulance transportation to the local hospital for medical care. These charges were the responsibility of the correctional medical unit of the county jail.

Site E: This facility had negotiated hospital rates that eliminated professional fees. All services were reviewed and monitored by the clerical support staff and submitted for payment. The administrative staff of this facility thinks progressively regarding cost controls and accountability.

Transportation was completed by internal resources. However, in the case of a life threatening emergency, an ambulance was called. These bills were treated in the same manner as those described above. This facility budgeted $36,000.00 for ambulance services, which was used sparingly.

Site F: Most of the administrative responsibility was handled at the corporate headquarter level. The health care administrator was an on-site person who dealt with daily routine functions only.

All outside consultations and hospitalizations were channeled through corporate headquarters for authorization. Limited autonomy and decision making was allowed on-site.

All billing was also conducted at the corporate headquarter level. The on-site administrator was merely a pass through for verification. **This site billed the individual inmate/patient or his/her insurance companies, Medicaid, etc. for services rendered. The inmate was responsible for all costs incurred from hospitalization or specialty clinics.**

If medical services were elective and not warranted, the inmate was required to sign a release of financial responsibility form. This ensured that the inmate was responsible for the costs associated with his/her services. All specialty services required prior approval by the corporate headquarters. There was an excellent tracking and accountability system in place to log all inmates sent out to the hospital from the intake area. All accompanying bills were handled in the same efficient manner.

Site G: Used a method similar to Site F.

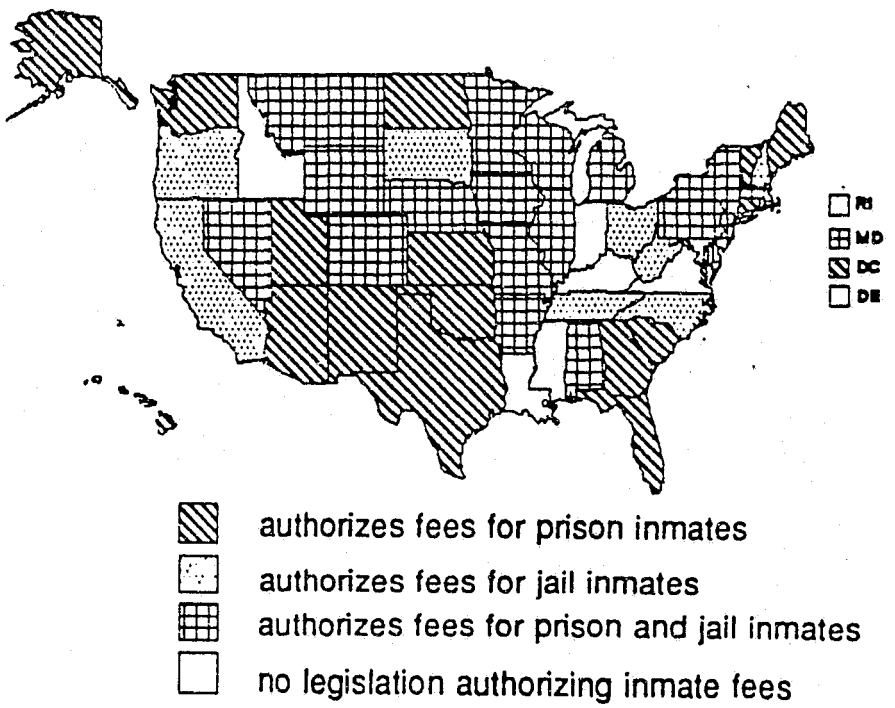
Site H: Site H conducted sporadic monitoring of all outside hospital costs including Ambulance, Specialty clinics and in-patient care. Monitoring of patient bills was conducted after the transfer of funds from the Sheriffs budget to the Health department. No monitoring of charges

was conducted at the level of county controller. This "paper transfer" of funds lacked accountability and cost saving strategies. This facility needs to incorporate a process for monitoring of bills to provide for accountability of funds.

The largest portion of health care costs were associated with in-patient hospitalizations, specialty clinics, emergency care, and emergency transportation services. Sites B and D did not review or track these types of services since they were provided by the County or City hospitals at no cost. These charges were "written off" as part of county expenses. However, Site D is in the process of developing a billing/tracking system to monitor health care expenditures. One site (Site B) was without a billing, tracking, monitoring mechanism to account for health care costs. This site (Site B) did not indicate a need to initiate tracking of hospitalizations, specialty services, emergency care or emergency transportation services for cost accountability.

The National Institute of Justice, NIJ, has recently completed a report on "Recovering Correctional Costs Through Offender Fees". The following map demonstrates the types of fees being authorized throughout the United States. The practice of charging inmates for program fees or service fees is becoming a viable alternative for jails.

Jurisdictions Authorizing Inmate Fees

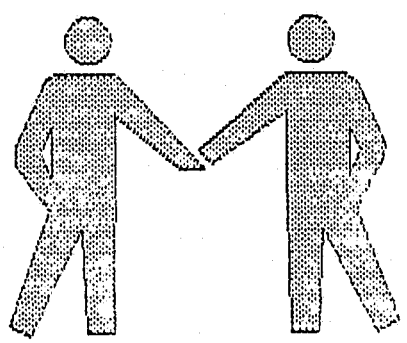


Recovering Correctional Costs Through Offender Fees, January 1991 - NIJ, National Criminal Justice Reference Service (800) 851-3420.

Rising medical costs may justify policy and legislative changes in order to generate revenue. Although these fees may be difficult to recover and not administratively cost-effective, each jurisdiction should review the legal and fiscal constraints regarding fee collection for medical services.

In summary, administrative functioning varied greatly among the systems reviewed. Examples of the differences among the eight (8) sites included the two (2) facilities which functioned with a "corporate headquarters" maintaining tight control over the expenditures. In a strictly "budgetary" frame of mind, this approach is ideal. This type of facility can effectively account for all costs. The atmosphere at this type of facility was "strictly business". In comparison, those involved with direct county "write off" or paper transfer maintained little or no control over expenditures, but were allowed greater freedom to exercise medical discretion. The struggle between service and cost will undoubtedly remain within the correctional health care system, as the majority of systems are public and non-profit entities.

A balance of adequate health care and cost effectiveness will determine the success of any correctional health care system. This may be accomplished by an experienced health care administrator with expertise in juggling services, budgets, and maintaining a cooperative working relationship with the Sheriff.



III. PERSONNEL

Medical personnel, salaries and benefits represent the largest specific cost factor accounting for more than 60% of the total overall medical budgets as shown in *Table 8*. *Table 9 A-H* show the diversity of percentage ranges of medical personnel to the overall medical budget.

TABLE 8
PERSONNEL VS OVERALL
HEALTH CARE COSTS

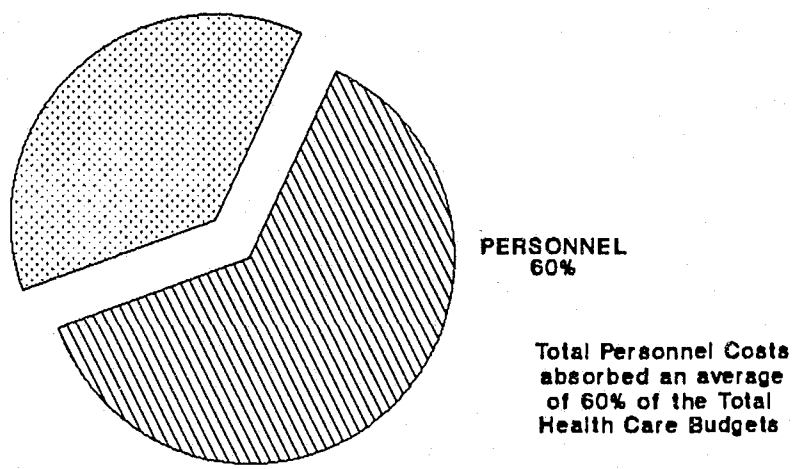
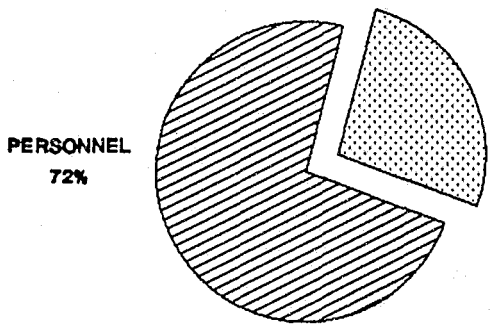


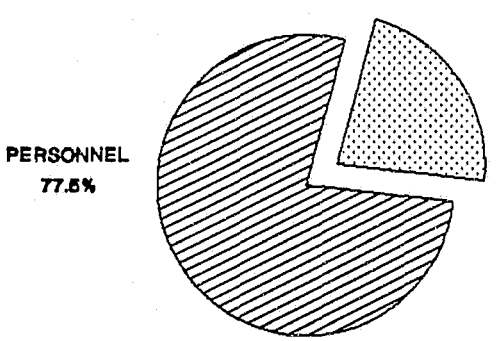
TABLE 9A
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE A



Total Personnel Costs absorbed an average of 72% of the Total Health Care Budget for Site A

TOTAL COSTS

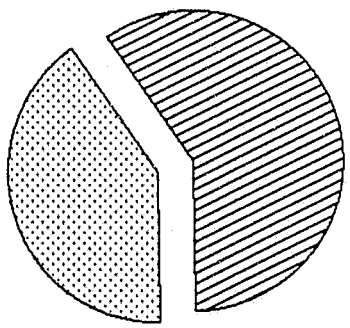
TABLE 9B
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE B



Total Personnel Costs absorbed an average of 77.5% of the Total Health Care Budget for Site B

TOTAL COSTS

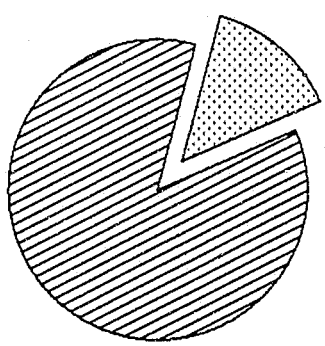
TABLE 9C
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE C



Total Personnel Costs absorbed an average of 60% of the Total Health Care Budget for Site C

TOTAL COSTS

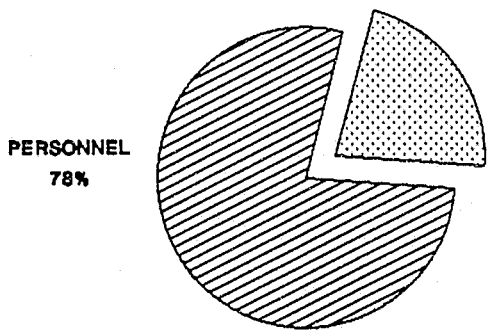
TABLE 9D
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE D



Total Personnel Costs absorbed an average of 71% of the Total Health Care Budget for Site D

TOTAL COSTS

TABLE 9E
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE E



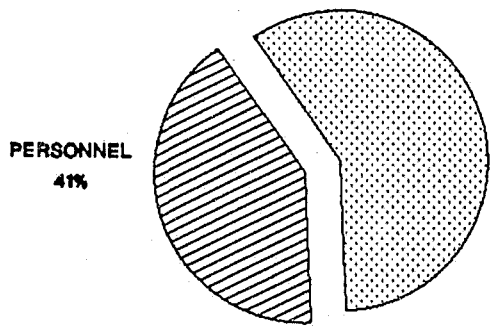
Total Personnel Costs absorbs an average of 72% of the Total Health Care Budget for Site A

TOTAL COSTS

TABLE 9F
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE F

INFORMATION UNAVAILABLE

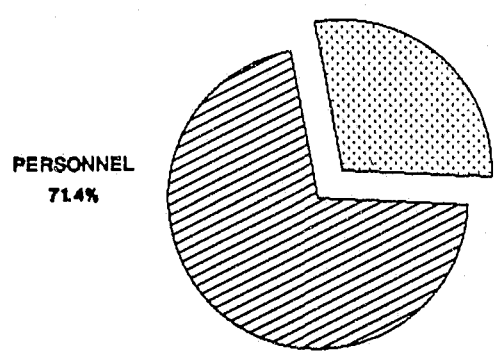
TABLE 9G
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE G



Total Personnel Costs absorbed an average of 41% of the Total Health Care Budget for Site G

TOTAL COSTS

TABLE 9H
PERCENTAGE OF PERSONNEL COSTS TO TOTAL MEDICAL BUDGET SITE H



Total Personnel Costs absorbed an average of 41% of the Total Health Care Budget for Site H

TOTAL COSTS

It is necessary to break out direct care staff vs support/administrative personnel to achieve reasonable comparison. The National Commission on Correctional Health Care states that there is no application or universal formula by which to calculate staffing levels or needs. Due to the diverse environment of each jail setting, accessible resources, special needs inmate populations and levels of service and care, staffing levels should be based upon positions and duties required. Ratios of staff to inmates may be of interest in looking at trends and general patterns. *Table 10* reflects a breakdown of various categories of staffing. Table 10 shows the ratio of health care staff to inmates. A further breakdown per site is reflected on charts 10A through 10H. The number of staff needed is basically dependent upon three factors:

A. Jail design and number of clinics required to operate.

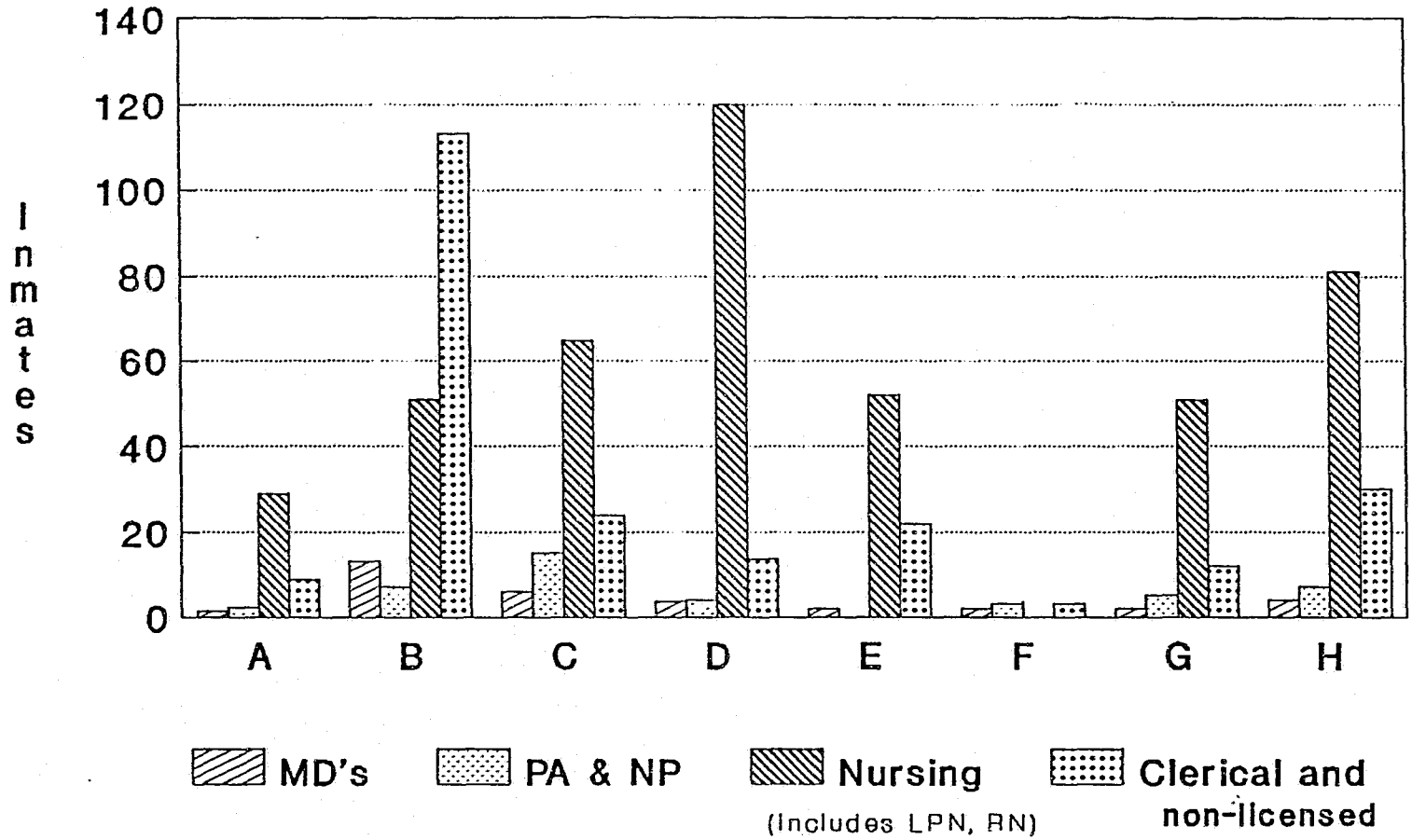
B. Detention support and transportation access impacting staff intensity.

C. Level of care and services.

D. Ages and chronicity of inmate population.

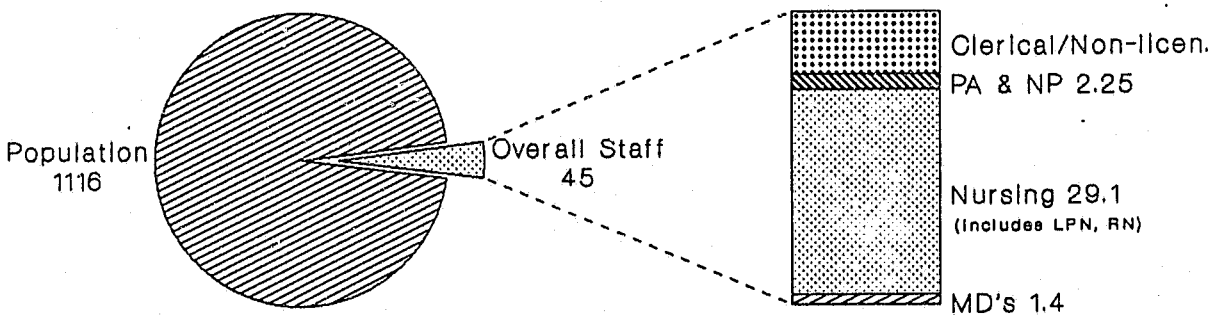
TABLE 10

RATIO OF TOTAL HEALTHCARE STAFF TO INMATE POPULATION



A further breakdown of specific nursing categories is contained in the nursing section.
No nursing stats available for Site F

TABLE 10A
Facility A
Comparison of Staff vs Total Population



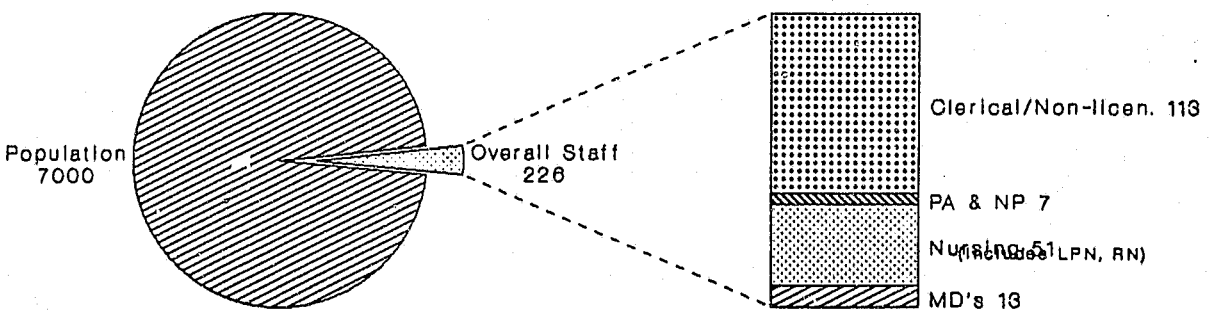
Staff vs. Population

Breakdown of Staff

OTHER = 3.45

N.B. Psychiatric staffing not included in overall staff.

TABLE 10B
Facility B
Comparison of Staff vs Total Population



Staff vs. Population

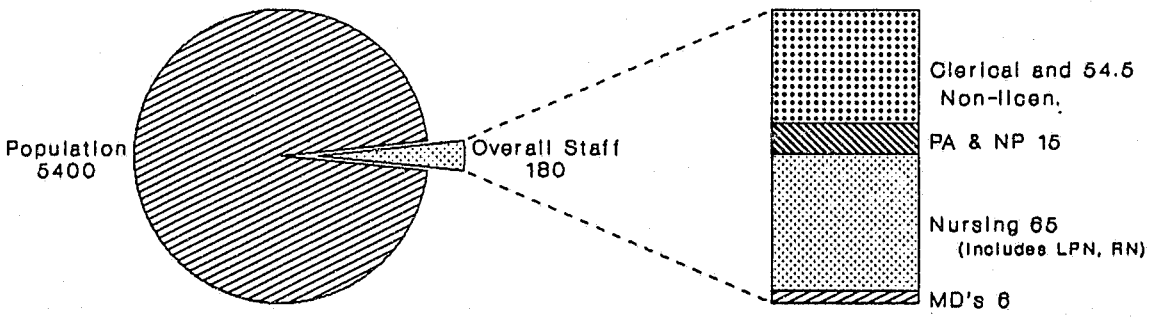
Breakdown of Staff

OTHER = 42

TABLE 10C

Facility C

Comparison of Staff vs Total Population



Staff vs. Population

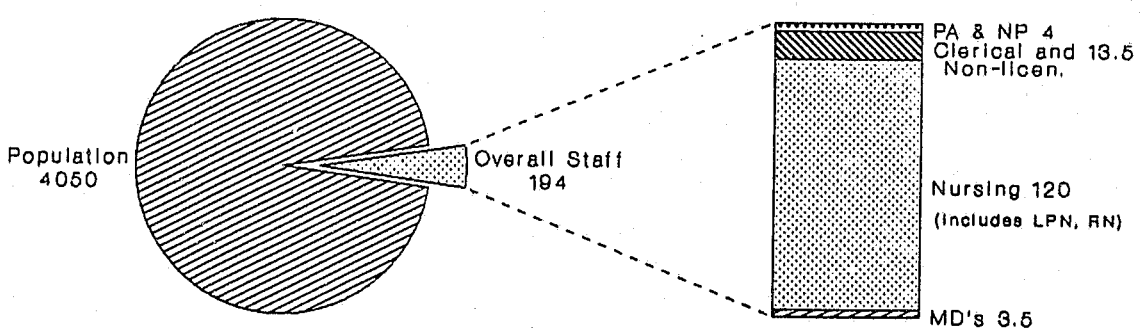
Breakdown of Staff

OHTER = 39.5

TABLE 10D

Facility D

Comparison of Staff vs Total Population

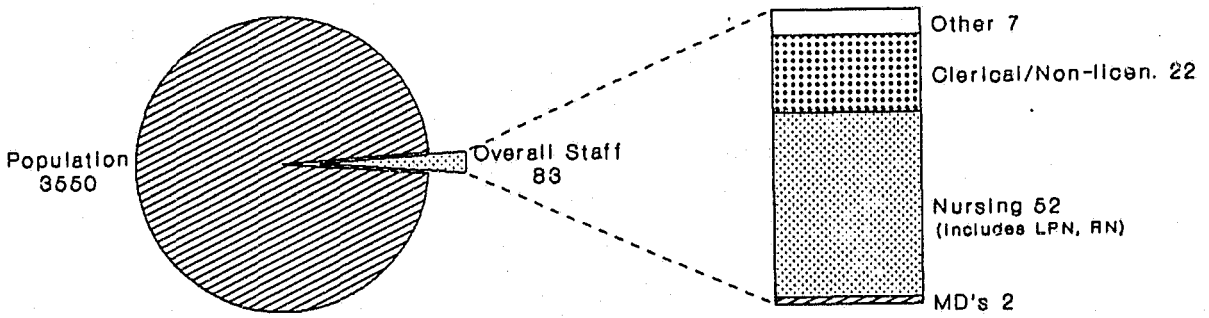


Staff vs. Population

Breakdown of Staff

OTHER = 53

TABLE 10E
Facility E
Comparison of Staff vs Total Population

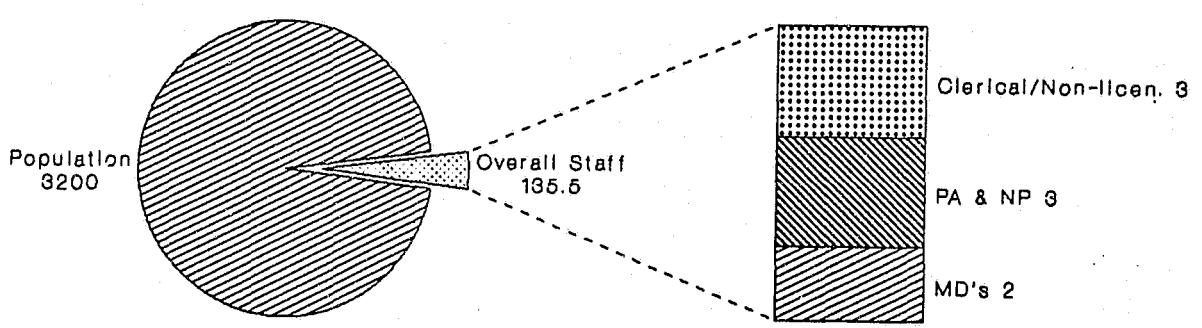


Staff vs. Population

Breakdown of Staff

OTHER = 7

TABLE 10F
Facility F
Comparison of Staff vs Total Population



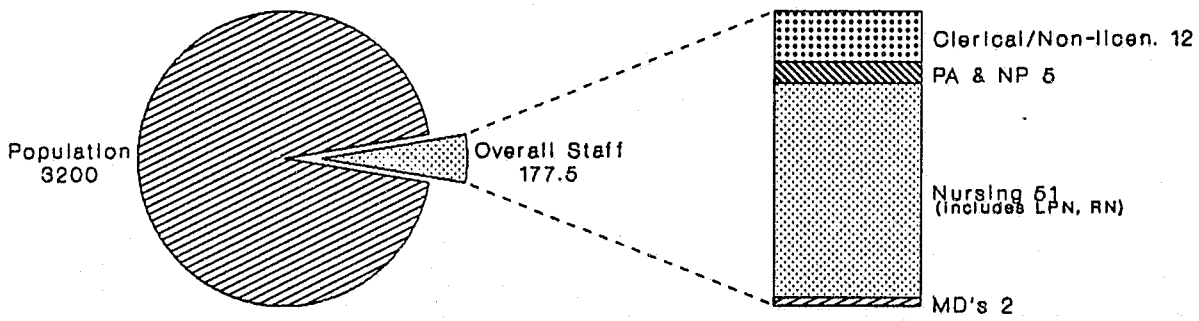
Staff vs. Population

Breakdown of Staff

NOTE: Nursing Staff Information unavailable

OTHER = 127.5

TABLE 10G
Facility G
Comparison of Staff vs Total Population

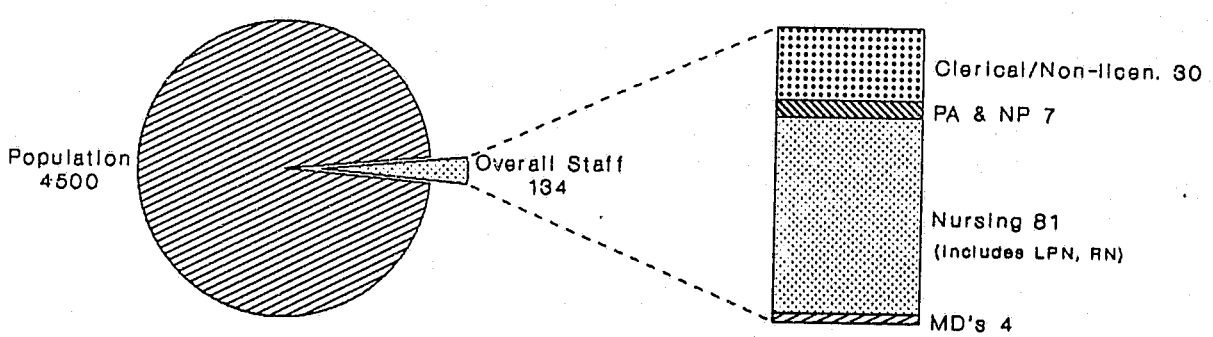


Staff vs. Population

Breakdown of Staff

OTHER = 107.5

TABLE 10H
Facility H
Comparison of Staff vs Total Population



Staff vs. Population

Breakdown of Staff

OTHER = 12

Jail design and space allocation will dictate whether or not there are centralized medical services or several duplicated clinics requiring multiple staffing and equipment. Quality, level and utilization of staff are equally, if not more, important than actual numbers and percentages.

Detention support will influence how efficiently you conduct business such as access to inmates and transportation. Is there built in downtime for your staff when inmates are inaccessible? Do medical staff distribute medications by going to the inmates or do the inmates go to them? You may need far fewer nurses if Detention assists in bringing the inmates to you. These costs are reflected in the day-to-day operations.

Personnel costs are impacted by numerous factors within the health care agency. Foremost in costs were salary ranges within a particular geographic region of the country. Worker's unions, professional organizations and state laws play a significant role in health care costs as well as determine the work scope or limitations of particular medical roles. Employee benefits varied widely and accounted for the work force stability or vacancy turnover rate. **Few systems employed registry nurses which can greatly inflate medical costs.** The Nurse Practice Act, which differs from state to state, plays a leading role in determining the work scope and duties of licensed medical nurses. The utilization of non-licensed para professionals such as EMT's (emergency medical technicians) or

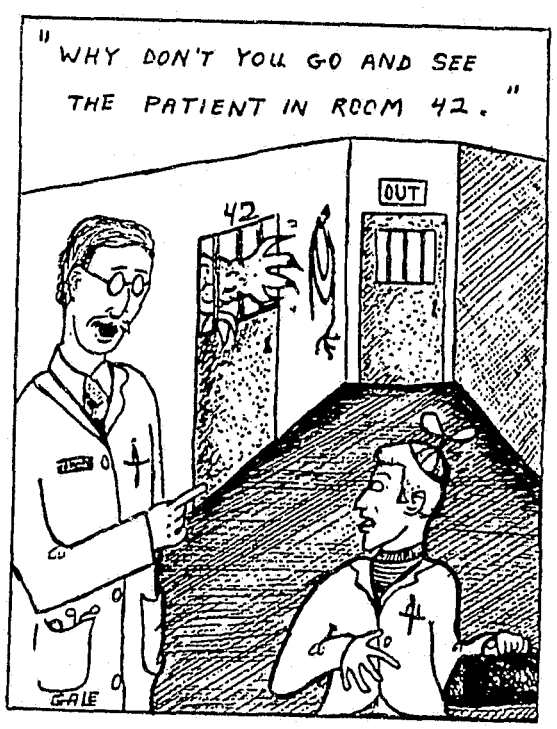
nursing assistants varied among the study. The general role of nursing will be discussed in greater detail under the nursing section. It is important to note the emphasis and focus of the various medical roles and its relationship to costs.

Differences in the study were observed in that Maricopa County Correctional Health was driven by its Provider's (M.D., P.A., N.P.) while other systems were nurse driven, clearly controlled by Administration. Nurse driven systems were service oriented; i,e., inmates were triaged and serviced; physician visits were screened and controlled by nursing. A Provider driven system may not function as cost effectively unless clinical controls are in place. Here, nurses will have less autonomy and less control of sick call and ancillary services. A strong administratively controlled health care system would define levels of service and ensure consistency by systematic scrutinization of costs.

It is important to evaluate the levels of service and responsibility performed by different medical personnel. Nurses and physicians should have adequate clerical support to allow nurses to perform nursing functions and not aide or clerical functions. Mid-level providers such as Physician Assistants or Nurse Practitioners may provide appropriate screening and intermediate care where physician services are not needed. Strong clinical leadership is essential to direct and monitor referrals, consultations and hospitalizations ordered by medical provider staff. The physician must be an integral component of the medical team.

Several systems observed appeared to have physicians operating in isolation with limited coordination and communication regarding day-to-day functioning and problems. Too few or too many MD's? Medical staffing needs to be determined by the assigned roles and responsibilities given the medical providers. The majority of Physicians were separately contracted staff who operated outside the realm and concern of a team management approach.

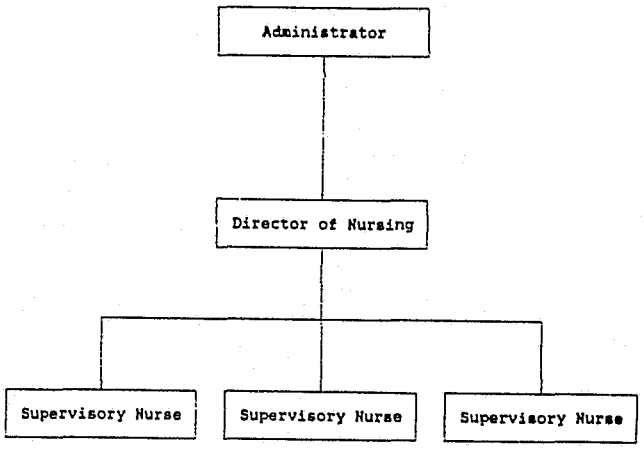
Training and orientation of new physicians is important to emphasize organizational direction and goals, priorities and philosophies. Many physicians practiced very conservatively, based upon fear of litigation by the inmate population. It is important to extend support and training in legal issues, and acceptable standards of care. Jail security orientation should be required for all new personnel to acquaint them with operational procedures and protocols.

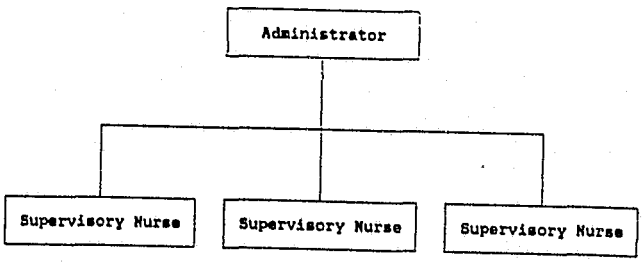


IV. NURSING COMPONENT

ADMINISTRATIVE NURSING STRUCTURE

A. Nursing Administration was separated into essentially two formats - the first being an appointed Director of Nursing with support staff in the form of Assistant Director(s) and/or supervisory nurses who report directly to an Administrator. The Administrators at half of the surveyed sites were nurses themselves. There was usually reporting between the top level nurse managers and the Program Administrator.





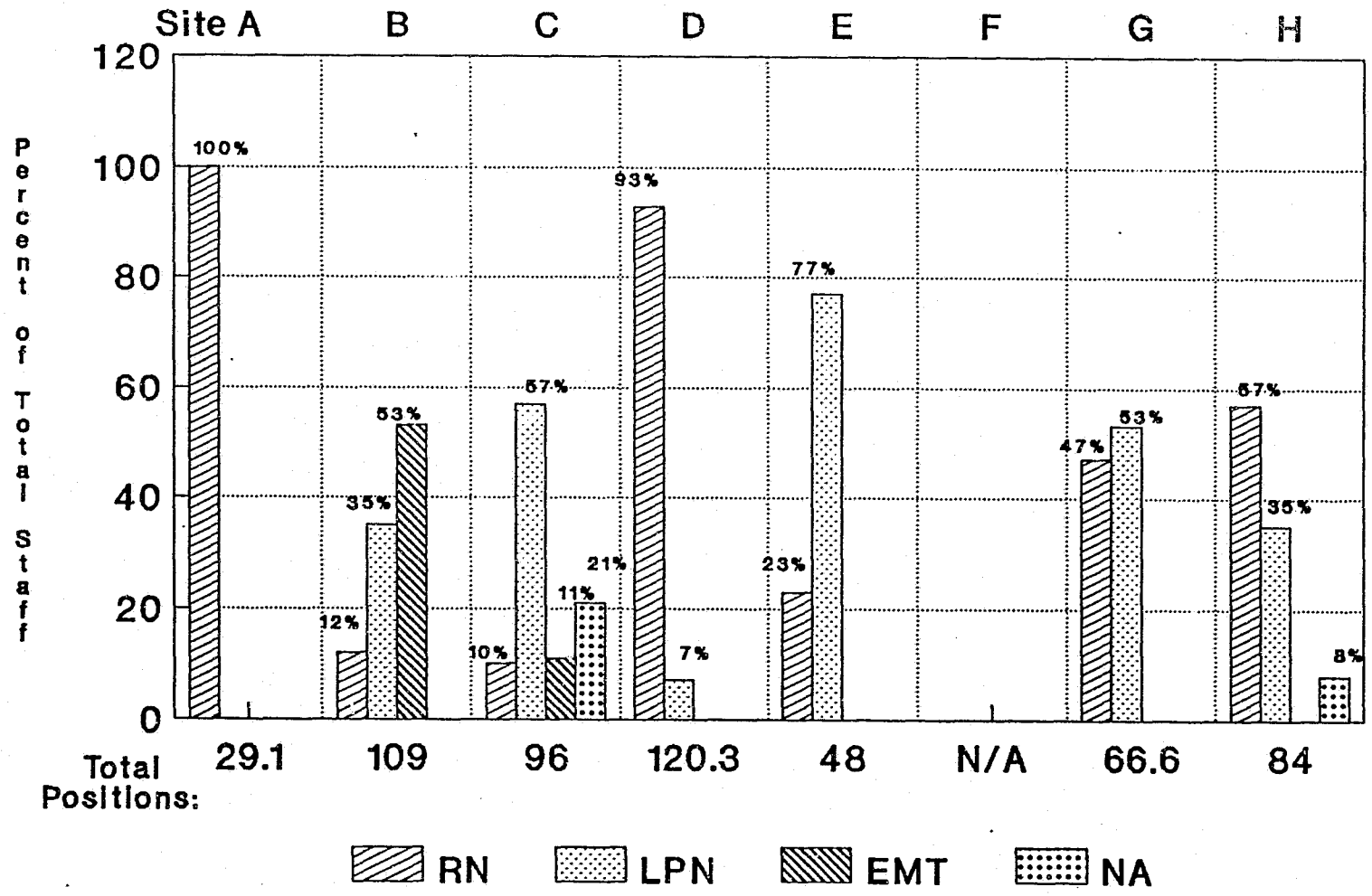
In addition to these upper management positions, several sites employed charge nurses who were responsible for operations by shift. These positions provided leadership on the off-shifts and dealt with scheduling and management issues occurring during their shifts. This alleviated, at least in part, the necessity for supervisory nurses to be on-call 24 hours a day.

B. TYPES OF STAFF EMPLOYED

The types of staff utilized included RN's, LPN's, NA's and EMT's dependent on the system and facility within the system. EMT's, when utilized, performed functions similar to the nursing staff, however, they were not in the nursing chain of command. There were separate EMT/Paramedic Supervisors. Use of nursing assistants was not common. When utilized, these positions usually performed functions such as phlebotomy and provider assistance with exams. The RN/LPN staffing ratios varied greatly from heavy LPN coverage with minimal RN supervision available to RN use only in all areas. Table 11 breaks down staffing by the percentage of positions and by the type of staff.

TABLE 11

PERCENTAGES OF NURSING AND RELATED STAFF



C. RECRUITING

At those systems surveyed that were a division of another local agency (such as a hospital, county health department, etc.), the recruiting was usually done through the affiliated agency. A few sites reported active recruiting done on their behalf with no trouble filling vacancies. Other sites did some recruiting over and above that done through their affiliating agency. **There were few reports of registry use.**

D. ADDITIONAL RESPONSIBILITIES

Any medical staff in-service provided on site was usually coordinated through nursing administration. There were few, if any, formal educational programs or designated educators. Some sites provided no on-site education or CPR for their employees. Detention supplied CPR training to several of the sites.

Quality Assurance (QA) often fell on nursing management as well. QA Coordinators were noted at two sites. The area of QA was significantly weak in several of the sites reviewed.

NURSING SERVICES

A. AVAILABILITY OF LICENSED STAFF

The types and numbers of nursing or other health care staff coverage at the sites varied widely with some variance in the staffing patterns for different facilities within a system. All sites had 24-hour coverage at least one facility within their system (usually RN coverage, though LPN's were on duty at some facilities). The Arizona State Board of Nursing precludes LPN's from completing initial assessments of patients without RN or physician supervision. Thus, staffing within the Maricopa County system is based upon the fact that LPN's cannot singularly be responsible for a site due to the possibility that assessments will be necessary. At those sites providing 24-hour nursing coverage, there is always at least one RN on duty per site. Though specific state regulations are unknown, this staffing pattern seemed to hold true for four of the other sites. The remainder of the sites had only LPN coverage at one or more facilities, but with an RN on duty somewhere in the system (frequently the booking area).

There were some non-licensed personnel employed to provide care at the level of EMT's. Of those sites employing EMT's, the area of greatest

utilization was intake. EMT's, in conjunction with a PA, were responsible for an initial screening/assessment on all inmates booked through a centralized area. Medical screening was completed on all inmates, including the screening for communicable disease. Any inmates with positive findings or in need of medication orders were referred to a PA assigned to intake or to the MD. The NCCHC 14-day PE requirements at these sites had been waived due to this extensive intake screening process. Additionally, EMT's were utilized to staff 24-hour clinics at some facilities. In this capacity, the EMT's were responsible for all the general duties for that area including: triage, medication administration, emergency response, assessments, dressings, sick call scheduling/assistance, etc. Those areas served by EMT's housed essentially healthy adults, without serious chronic or acute conditions.

Two sites, employed nursing assistants or medical assistants. Those personnel were utilized in a limited capacity and performed such functions as phlebotomy, vital signs, and assistance with exams. One site also utilized Nursing Assistants in the infirmary to assist with some patient care functions.

At several sites, the medical needs of each inmate were part of the housing assignment process. During the intake screening process, some

determination was made by medical staff (EMT, RN, etc.) as to what housing area/facility would be appropriate for an inmate's needs. The basic criteria included types of medical problems, severity and degree of control of the problem, need for medication and potential need for medical intervention. When there is input of this type into housing assignments, medical staffing can be geared to the needs of a facility. For example, a facility housing essentially healthy males, or with a high volume of work release inmates, would require minimal medical coverage. The sites accomplished this by working an abbreviated schedule (RN on site 4-16 hours a day, on designated days only with provider sick call, one to two days a week etc.) or by staffing the areas with non-licensed staff such as EMT's or higher concentrations of LPN's. Facilities housing inmates with severe acute or chronic medical problems with a potential need for more medical intervention were then staffed on a 24-hour/7 day a week basis with employees of a higher skill level (higher concentration of RN staff). This was one way of maintaining closer monitoring of those inmates in the latter group. One concern with this type of system is for those inmates who are somehow misplaced or "fall through the cracks" or whose conditions go unattended due to decreased availability of staff or the low skill levels of available staff. The integration of this type of system with inmate classification was unclear.

B. MEDICATION ADMINISTRATION

Routine medication administration was accomplished by LPN's, RN's, and/or EMT's. Many sites utilized stock bottles from which the staff administered single doses of medication 3-5 times daily. Few unit dose packaged medications were used. Medications were administered at inmate housing locations or at a designated "pill room" where inmates would report for medication. The practice at some sites was to allow inmates to have up to a 14-day supply of select medications such as antibiotics on person. Any abuse of this system resulted in per-dose administration by the medical staff, however, compliance was not noted as a particular problem. The documentation of prescription medication administration seemed standardized with few differences between systems.

Use and availability of OTC (over-the-counter) medication varied among systems. Detention officers had limited authorization, if any, to administer OTC medications to inmates--Tylenol was the only authorized OTC noted on the surveys with one exception. The majority of the systems required that all OTC medications (up to eight meds available, dependent on-site) be administered by the medical staff. Specific criteria for their administration was unknown, although a nursing assessment was required prior to administration of OTC's in some instances.

Documentation of OTC administration by medical staff varied from:

1. None.
2. Use of a standard medication record.
3. "OTC" log, listing patient, type of medication, who administered it and time of administration.

Enabling the medical staff to administer some commonly used OTC medications such as cold remedies, etc. without a physician's order could reduce sick call visits, paper processing, and time lapse in the inmates receiving medications. The use of an OTC log seemed an efficient way to document the administration of the allowed OTC medications. The only concern for the administration of the OTC's was the need for criteria to avoid contraindicated administration. (Refer to the Pharmacy section for further information on medications.)

C. CLERICAL FUNCTIONS

Clerical duties were similar at all sites with nursing and clerical sharing some tasks. Clerical alone was usually responsible for filing and pulling medical records. They also opened charts at some sites. At those sites where medical was responsible for arranging specialty clinic or other off-

site appointments, the clerks usually made those arrangements though there were some "coordinators" with that responsibility as well as nursing. Few sites employed clerks to transcribe orders; this was nearly always a nursing function.

One site had a computerized sick call scheduling mechanism. This allowed for the entry of a sick call appointment for a given inmate. The computer printed daily sick call lists with the pre-scheduled list of inmates. Any inmate transferred to another facility was transferred to that facility's list by the computer. The computer also updated housing assignments, removed releases, etc. on the list. The benefits of this system included improved continuity of care and the saving of many man-hours in producing schedules and tracking.

D. INTAKE SCREENING

There was 24-hour medical staff available to intake at all sites. The hours of medical staff on-site in intake ranged from 12 to 24 hours per day. This coverage was provided by RN's, LPN's or EMT's working in conjunction with a PA. Medical staff were responsible for the receiving

screening at five sites. Detention staff completed all intake screening at two sites, and conducted the intake screening when the medical staff were unavailable at the remaining site.

Along with the screening, additional services were sometimes completed in intake, such as: obtaining a consent, initiating a medical record or temporary folder, TB skin tests, and health assessments.

E. CHART TRANSFER

There seemed to be a universal tracking problem with medical records when inmates transferred among facilities at different geographic locations. These record transfers were usually accomplished by a courier or through detention officers delivering the charts between sites. Sealed bags may be used to transfer the charts, however, the delivery/receipt was never guaranteed to take place as intended. This problem was reduced considerably when all facilities were located on the same site or compound.

Transfer summaries were utilized to relay information to other correctional institutions receiving the inmate. Referral forms of various types were used when referring to a specialist, hospital, or ER.

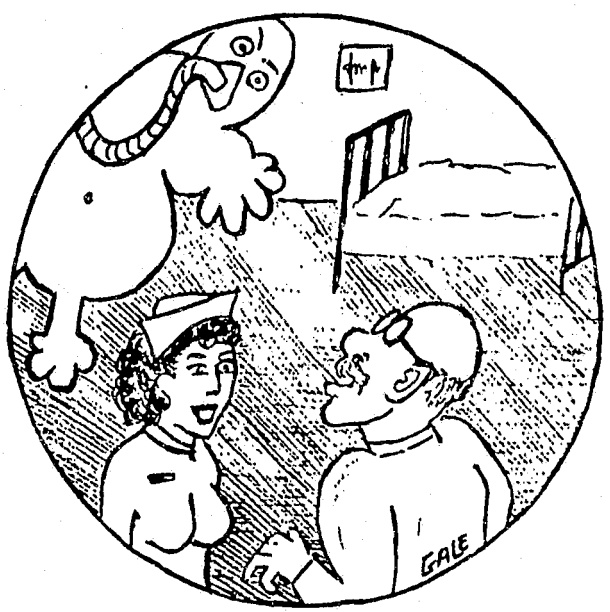
F. ON-SITE CARE, SICK CALL, PE'S

Some form of triage, either in person or by sick call slip was conducted at all sites prior to inmate evaluation by a medical provider (MD, PA, or NP). This triage was most often performed by RN's, although LPN's and EMT's were also assigned this task at several sites.

The trend, with few exceptions, was to complete as much of the triage/sick call process as possible at the housing units rather than in a centralized area at each facility. Medical staff would distribute and receive sick call slips at any time while they were in the housing unit. Four sites had an exam room or private area in each housing unit for medical use. This "on-site" process provided the inmates with increased and expedited access to medical care and personnel. This process usually called for triage with either a resultant referral to a medical provider as "sick call" or a disposition of the complaint by the nurse or EMT.

The team approach was useful in those sites employing it. One site utilized provider/nurse teams with sick call conducted in the housing unit. This allowed for the establishment of a primary care provider as well as provider/patient familiarity and essentially unlimited access to care. Any

"block" problems were addressed through an inmate representative. This was intended to facilitate care and communication, and to reduce manipulation.



"I think we should turn down Mr. Pink's respirator a bit."

Another "team" application involved the assignment of RN teams to specific housing locations where they were responsible for all medical services to those inmates: triage, medication administration, provider referrals, and physical exams. This helped to promote consistency, familiarity and "ownership".

Sites were almost evenly divided in their use of Nursing Triage Protocols. Only three sites had protocols in use that provided for medication orders without contacting the provider on-call. Treatment Protocols were also utilized for medical, dental, or psychiatric treatment. Sites without protocols required that the on-call provider be contacted for any medication orders, or, if available, the on-site provider evaluate the inmate.

The trend in completing the 14 days health appraisal was definitely to delegate this responsibility to staff other than the medical providers (M.D.'s, PA's, N.P.'s). All but one site were utilizing RN's, LPN's or EMT's in some capacity to complete PE's. EMT's were employed to complete assessments in conjunction with a PA, upon intake into the system. LPN's were utilized in a team manner with RN's. RN/LPN teams were assigned to specific areas. The LPN assisted with lab and data collection, TB skin testing, etc. The RN then completed a health assessment. RN's only had this responsibility at three sites.

The format and type of assessment documented by these personnel was usually simplified somewhat from what would be expected of a medical provider (PA, M.D., NP). Genital and rectal exams were often referred to a provider if a need was identified. At some sites, nurses completed

PE's on men only; all females were referred to a provider. Anyone with positive findings on evaluation or anyone determined to a need a more extensive exam was referred to a medical provider for evaluation. Annual PE updates were completed by these personnel or by a provider in the clinic.

Training for personnel assigned to complete physical exams varied from on the job ("see one, do one") training, to structured M.D. in service, to off-site nursing physical assessment classes. RN's trained to conduct physical exams increased the number of physicals that could be completed due to the larger number of staff available. This allowed the medical providers to see patients with legitimate medical problems and reduce their time in completing routine physical exams.

Provider sick call hours varied. There were staggered schedules at some sites providing half day or full day clinics at various facilities two to three days a week. Most sites held eight hour sick call Monday through Friday at a minimum of one facility. Provider hours were sometimes staggered to provide coverage into the early evening.

Though some sites utilized 24-hour/7 days MD coverage, most systems had only eight hour MD on-site coverage with the remainder of time

relegated to on-call providers. The on-call consisted of phone referrals only as a rule, but one system did have a provider available to come in if so indicated to avoid a referral to the ER.

On-site services and specific procedures were limited to: simple suturing, casts, splints, and possibly some minor surgeries. Inmates were referred out to the emergency room or to an off-site specialty clinic for other services. Several exceptions were systems with the availability of on-site specialty clinics.

In addition to routine provider coverage, each site had Dental Services. Seven of the eight sites also had specialty clinics numbering from one to as many as 13 offered on site, including such things as OB, Dermatology, Neuro, Cardiology, ENT, Eye, Ortho, etc. The availability of these on-site clinics provided for decreased off-site transportation and more timely appointments. On-site specialty clinics are detailed in *Table 7*.

Prenatal services were not found to be extensive as a rule. The standard service offered was a weekly or periodic OB clinic with services by a family practice Nurse Practioner or MD along with some prenatal classes or pamphlet-type literature. Two sites had OB care provided by public health or at an outside hospital. Ultrasounds were not typically done on-

site with the exception of Maricopa County Correctional Health Services. One system did have a coordinator position to provided social services, health education, and follow-up to pregnant inmates. Abortions and tubal ligations were provided by one site only.

Almost all of the surveyed sites had an infirmary as detailed in *Table 6*. For the most part, these units were essentially self-care. Half of the sites with infirmaries provided some IV therapy--usually for hydration or IV antibiotics. Convalescent care, assistance with activities of daily living for paraplegics and quadriplegics or other handicapped persons, diabetic monitoring, housing for inmates with wired jaws, and care for symptomatic HIV positive inmates were other types of services offered. Communicable diseases such as hepatitis were also isolated in these infirmary units. Three sites had rooms with ventilation to the outside to accommodate active TB cases. This prevented referrals to the local hospital, which reduced inpatient costs.

G. ON-SITE RADIOLOGY/LAB SERVICES

All sites but one had basic x-ray (no contrast films, etc.) services Monday through Friday on-site at one of their facilities. The remaining site had access to a mobile x-ray van for chest x-rays. There were also sites with

an x-ray tech on-call available off hours if necessary to prevent an ER referral (the on-call provider would also come in). Special radiologic procedures/services were referred out.

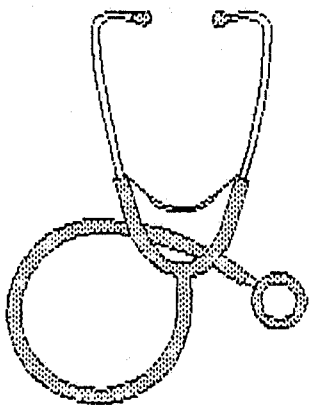
Most sites had at least some on-site lab testing capabilities. These ranged from hematocrits, blood glucose, and UA's to drug levels, blood chemistry panels, CBC's and sexually transmitted disease screening (VDRL's, GC cultures). Lab specimens were usually collected by nursing or nursing assistant staff, though some techs were available.

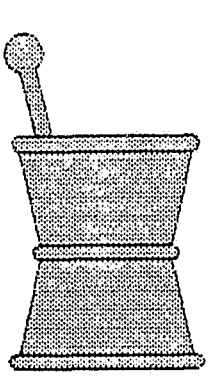
Lab tests not conducted on-site were referred out to privately contracted labs, State or public health labs, or to the hospital providing service to the site.

H. OTHER SERVICES PROVIDED BY HEALTH CARE PERSONNEL

Three health care systems assisted in training for detention officers on health related topics and policies/procedures of the health services provider. This training was conducted by nursing staff and Director or Assistant Directors of Nursing. TB skin testing for officers was also provided at one site.

All sites provided some inservice for the health staff. When available, this was usually provided or coordinated through nursing administration. Two sites had an appointed education coordinator.





V. PHARMACY SERVICES

A. LOCATION AND METHOD OF TRANSPORTATION

Pharmacy services were provided at all sites visited, in widely varying degrees of scope of service. With a single exception, which had satellite pharmacies located in all facilities of the system, pharmacy services were located at a single site, usually the main jail that provided the bulk of medical services for the system.

Two of the systems surveyed had contracted pharmacy services located completely off-site. Medications were delivered either daily or weekly from these privately contracted pharmacies to each of the jail sites. The remainder of the centrally located pharmacies received prescriptions from and transported medications to other facilities by a variety of methods.

One system was unique in that all buildings of the jail were centrally located, thus it was the responsibility of the nursing staff from each housing unit to deliver the prescription orders to the pharmacy and to pick up the medications for their housing units.

Two of the sites utilized the transportation officers of the sheriff's departments for this function, transporting medications to other facilities in locked boxes.

One site utilized a private courier service, while at another, a courier was employed by the department of health services. At these sites, the courier made rounds to all facilities three times a day, picking up prescription orders, and delivering medications.

B. HOURS OF OPERATION AND EMERGENCY COVERAGE

The hours of Pharmacy operation varied widely, dependent primarily upon the scope of services provided.

The two privately contracted pharmacies located off site provided delivery either on a daily or weekly basis. The site which received daily deliveries also had emergency services available 24-hours per day. If these services were required, a nurse from the facility would pick up the medication at the off-site contract pharmacy. The site receiving weekly deliveries had no provisions available from the contract pharmacy for emergency needs.

One site had a full two shifts of coverage available six days a week. At this site, emergency medications were provided at the on-site emergency room, with no pharmacist available after hours.

One site provided ten hours of coverage Monday through Friday and eight hours of coverage on Saturday. Provisions for emergency medications were available through the pharmacy at the hospital, and delivered to the jail during off hours by the hospital courier. There was no pharmacist on call at this site.

Two sites provided services for ten hours daily, Monday through Friday. During off hours, a pharmacist was on-call for emergencies, and delivered the emergency medications to the jails when necessary. One of these sites encouraged consultation calls during off-hours by nursing and medical providers.

The remaining two sites provided limited coverage, with a pharmacist on location four hours daily, Monday through Friday. One of these sites had no provision for emergency medication needs, the other offered 24-hour on-call services.

C. METHOD OF DRUG DISTRIBUTION

Pharmacy services at the sites varied widely, but in many instances were rudimentary, and seemingly not an area which received much attention. The majority of the sites provided only stock bottles of medication for administration by the nursing or EMT staffs.

This method of drug distribution, although cost- and time-effective, leaves the system vulnerable to medication errors which can be compounded each time a drug is administered. This method does not allow for a mechanism to double check an order prior to administration. Errors can remain undetected throughout the entire course of treatment. By employing this method of drug distribution, the liability for ensuring proper administration of prescriptions rests solely with the nursing or EMT staffs, bypassing the pharmacist review process entirely.

At one site, most medications were dispensed from a contract pharmacy in a two-week supply, which the inmates were allowed to keep in their cells. Certain medications, primarily psychotropics and controlled substances, were prohibited from this in-cell procedure, and were administered by the nursing staff on a dose-by-dose basis from stock bottles.

Three sites, two of them privately contracted, had unit dose systems of varying degrees of sophistication. One site provided unit dose medications in zip-lock bags placed behind each medication administration card on a daily basis. This method allowed the bypassing of a nurse's need to "repour" the medications prior to administration.

A second site employing unit dose drug delivery filled the unit dose carts twice weekly at each site, providing additional medication upon request of the nursing staff.

The third site utilizing the unit dose method was fully unit dose, supplying all medications in single unit dose form on a daily basis.

The sites providing a unit dose system of drug delivery from the pharmacy reported far fewer medication errors than those utilizing stock medications in bulk form. In these areas, pharmacy services were a much more integral part of overall health care delivery, providing a vital function of accurate medication delivery, as well as monitoring drug utilization and cost control.

Although initially a unit dose system appears to be more costly, and is certainly more work-intensive, the return on investment is considerably higher. With the unit dose method of drug delivery, there is virtually no waste, and no need to dispose of unused doses. Fewer medications must be purchased to supply the needs of the inmates, thereby saving valuable budget dollars from being tied up in excessive inventories required by the stock bottle method. This also results in fewer medications reaching the manufacturer's expiration dates and having to return the medications for credit, or, in the case of most open stock bottles, having to destroy the outdated drugs.

Clinically, the advantages of the unit dose system of medication delivery are unsurpassed. Primarily, the prescription order is reviewed for accuracy and appropriateness prior to administration to the patient. By this method, the expertise and training of the pharmacist is utilized to the fullest extent. The medications are monitored for drug interactions and contraindications, and reviewed on a regular (usually daily) basis, as they are dispensed.

With the stock bottle method of drug delivery, the function of the pharmacist is reduced to a purely technical level, merely supplying large bottles of medications to an area for administration. In most instances,

there is little or no review of the actual prescription orders, consequently, no monitoring of any sort performed by the pharmacist.

In a few areas, some "keep on person" medications were provided, primarily antibiotics. These prescriptions were dispensed from the pharmacy for the full duration (up to 14 days) of the order. This method insured that the inmate would receive the full course of treatment, even if he was away from his housing unit, or was released prior to completion of the course of treatment. The sites utilizing this method reported few compliance problems due to counseling by both the prescriber and the nursing staff prior to administration of the medication. Any abuse of this system resulted in the medication being administered by the nursing or EMT staffs on a dose-by-dose basis.

D. PSYCHOTROPIC MEDICATIONS

At most sites, the administration of psychotropic medications required special attention. Many areas dispensed these medications in liquid form, or had the tablets or capsules administered "under water" to ensure compliance, at least initially. In some areas, once a patient was stabilized, administration in tablet or capsule form was permitted.

E. ORDER PROCEDURES

The procedures for ordering pharmaceuticals varied from site to site. This was of no concern at the sites having privately contracted pharmacies, however, was a source of considerable frustration at several other sites.

All sites had pharmaceutical contracts of some sort in place. The areas which were required to purchase directly from drug companies through a government contract expressed the most frustration and difficulties in the ordering process. This method of purchasing requires the generation of requisitions and purchase orders by the pharmacy staff, often requiring a lengthy approval process prior to the order being placed. This method resulted in frequent stock shortages while enduring procedural red tape. In an effort to avoid shorts and outs in the vital area of pharmaceuticals, most areas increased inventories and stock levels. As a result, budget dollars were tied up in excessive inventories.

At three sites, the prime vendor system of purchasing was utilized. This method involves awarding pharmaceutical contracts to individual manufacturers, which are supplied through a local wholesaler, who has bid on a contract as well. This method of ordering is definitely the trend

in pharmaceutical purchasing. Drug manufacturers support it, since it reduces their costs by shipping to a single site (the wholesaler) rather than multiple sites (individual pharmacies). Cost savings are significant for the pharmacies in a two-fold fashion. Workload is reduced, since orders can be placed by telephone or electronic order entry system, avoiding the procedural red tape. Also, inventory levels can be significantly reduced, since terms of the contract ensure adequate supply, and thereby budget dollars are freed. The stock turnover rate is increased, resulting in fewer outdated medications.

F. EQUIPMENT

The equipment found at each site varied, primarily dependent upon the level of services provided. At sites providing only stock bottles of medication and no review of actual prescriptions, there was no equipment, since none was necessary.

Sites providing unit dose drug delivery had packaging machines and labeling machines consistent with this method of drug delivery.

Three sites had the availability of computers, significantly enhancing the services they were capable of providing. In two of these areas, drug utilizations review was provided in an effort to provide a mechanism for cost control. The third site with computers seemed to under-utilize them, providing patient records and an ordering mechanism only.

G. PATIENT PROFILES

Only half of the sites visited kept patient records. All sites with computerization were able to maintain extensive patient records, monitoring drug interactions, allergies and contraindications. All sites employing the unit dose method of drug distribution maintained patient profiles either by computer or manually. One site which supplied stock bottles of medication kept patient records, primarily due to the availability of computers at this site.

H. PRESCRIPTION VOLUME

All of the sites visited except one maintained statistics on the daily volume of prescriptions. This volume ranged from 70 to 550 prescriptions dispensed per day. The daily volume was not totally related to the inmate population, but was also dependent on such factors as sick call

procedures, numbers of providers, and clinical scopes of practice by providers and nurses. The sites providing computerized drug utilization reviews appeared to have lower overall volumes of prescriptions, indicating true cost control measures.

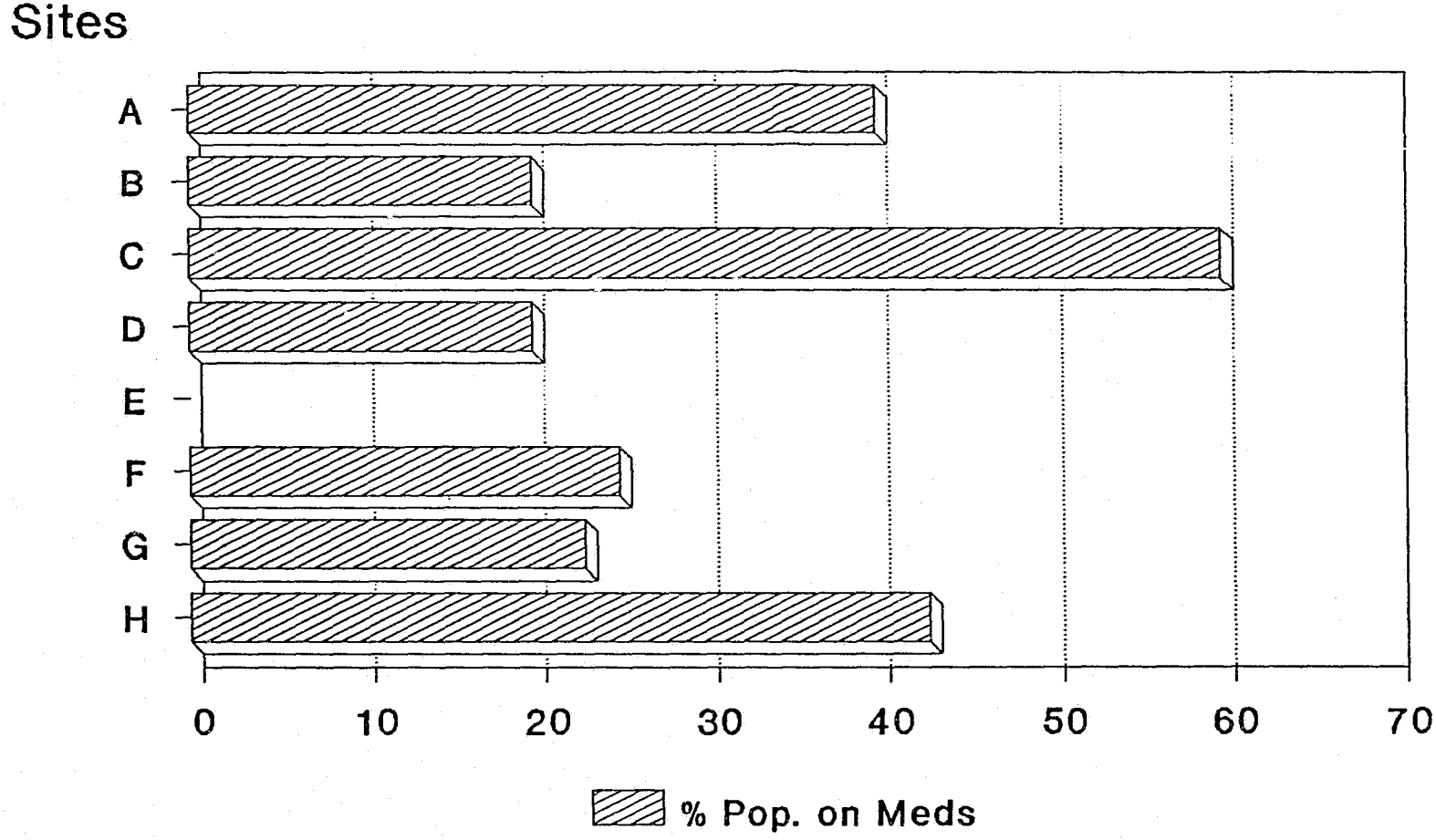
The percentage of the inmate population receiving medications ranged from 20% to 60%. This percentage was dependent on sick call procedures, scopes of practice, and ability to conduct drug utilization reviews. *(See Table 12)*

At the sites where RN's performed physical examinations, and the initial triage of inmates for sick call, the percentage of inmates receiving medications was significantly reduced.

The percentage of the inmate population receiving psychotropic medications varied widely, dependent on the scope of psychiatric services provided. Many sites had limited psychiatric services, and thus a lower percentage receiving psychotropic medications. At sites with extensive psychiatric programs, the percentage rose accordingly.

TABLE 12

Percentage of Population on Medications



Site E is not available

I. AUTOMATIC STOP ORDERS

Every site employed automatic stop orders for medication, ranging from 28-30 days, however one site did have a 60 day automatic stop order for maintenance medications.

In areas that were computerized, the renewal list was generated from the pharmacy and sent to the medical providers 7-12 days prior to expiration of the order.

At all other sites, nurses pulled the chart for provider renewal prior to expiration.

J. PROPERTY MEDICATIONS

All sites placed personal medications in the inmate's property until release, and all medications were supplied from the pharmacy during incarceration. Half the sites did allow the use of personal medication if the drug was non-formulary, rare, or unable to be obtained from the pharmacy.

Inmates participating in a work-release program were required to provide their own medications at two of the sites.

K. FORMULARY

All of the sites operated with a specific drug formulary in place. These formularies tailored the medications to the needs of the inmate population, reducing the necessity to provide multiple medications to treat any particular indication. It was agreed by pharmacists at all sites that operating within a closed formulary helps greatly in cost containment.

All but two of the sites did have provisions in place allowing for the prescribing of non-formulary medications when necessary. Most of these sites required justification by the prescriber and authorization by the pharmacist and/or the medical director prior to a non-formulary medication being obtained.

L. PHARMACY AND THERAPEUTICS COMMITTEE

Half of the sites surveyed had or participated in a Pharmacy and Therapeutics Committee. Two sites had their own committees, two participated in the hospital or health department committee, and one was a part of the Quality Assurance Committee. Meetings ranged from monthly to quarterly, or on an as needed basis. The functions of the

P & T Committees were to add and delete medications from the formulary, monitor drug utilization, set pharmacy and medication administration policies, and to monitor cost control measures.

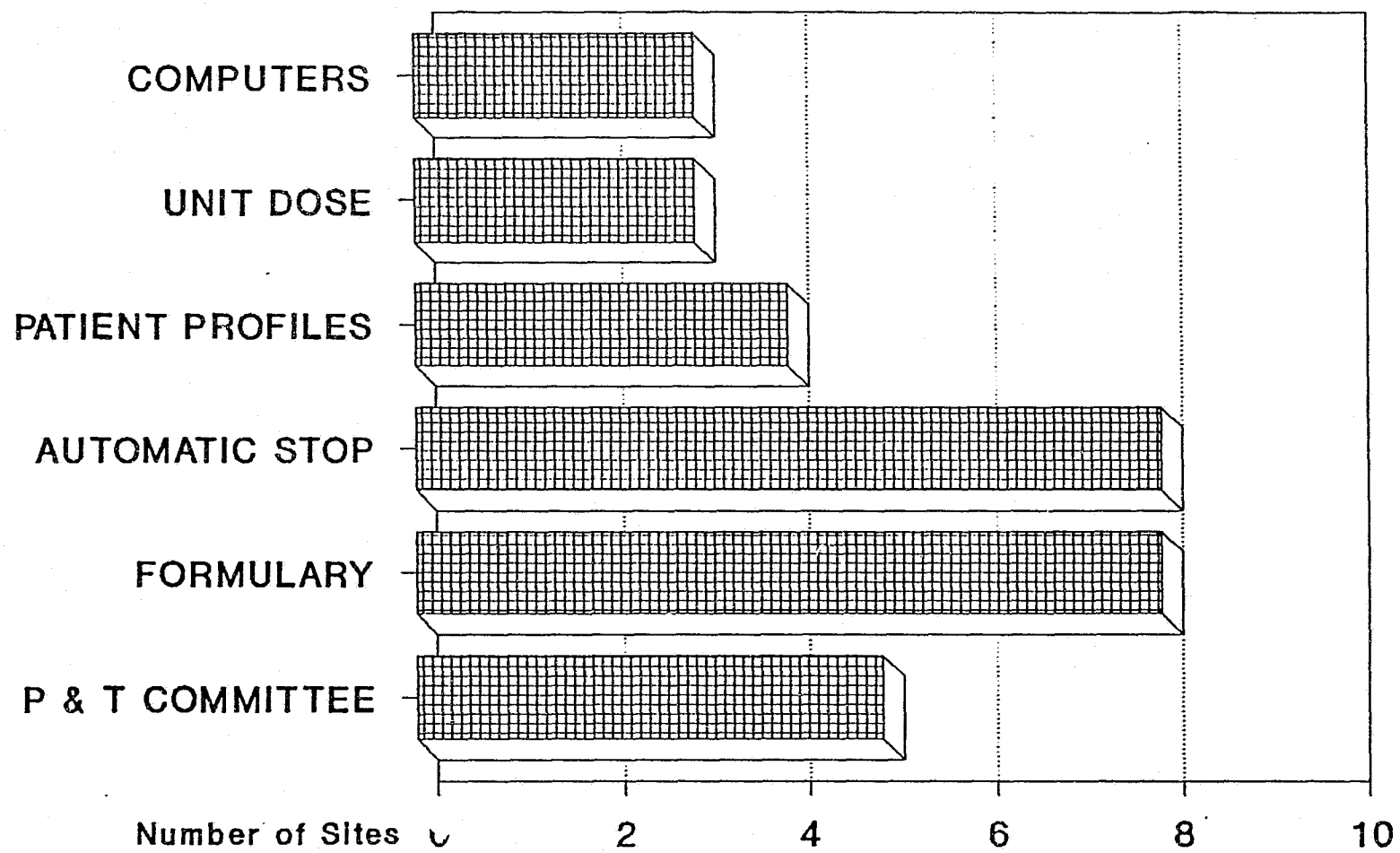
The sites having committees of their own placed a far greater emphasis on drug utilization and cost control measures than did the sites participating in outside committees, or those sites which had no involvement.

(See Table 13)

M. AIDS TREATMENT

All of the sites surveyed provided HIV testing, however, treatment for positive HIV patients varied. One site, although providing testing, did nothing toward the treatment of AIDS patients other than to place them on a waiting list to be treated at the Health Department AIDS clinic, which had a long waiting list. Symptomatic patients at this site received no in-house treatment of any kind.

TABLE 13
Pharmacy Services



All of the remaining sites had from 3 to 30 inmates currently receiving AZT or other drug treatments. Pentamidine treatments were administered at only three sites, mainly due to the lack of availability of negative air flow rooms at most sites. Most of these areas also offered AIDS counseling, varying in degrees from superficial to intensive.

Several sites had plans to have an on-site specialty clinic for AIDS patients. These clinics would be designed to meet the unique needs of AIDS patients in areas of treatments and counseling, including referrals upon release.

It was agreed that the inmate populations are high risk, and the numbers of HIV positive inmates are growing at all sites. As these numbers continue to increase, health care delivery within the jail environment will be severely impacted due to the high costs and complexities of treatment.

VI. CONCLUSIONS AND RECOMMENDATIONS

As a result of the site reviews and data collection, recommendations were formulated for Correctional Health Systems. Cost effective operational practices, management strategies and clinical approaches were reviewed for consideration and applicability. The following findings were reached by the grant project staff.

ADMINISTRATION

1. Medical care within Correctional Systems was suitably managed by Health Departments or private health contractors. There was no benefit to Sheriff operated Health Care although we experienced well-managed health care within the Sheriff's purview. The majority of correctional health systems were managed by a comprehensive network of health care channels allowing for a leveled structure of monitoring and review.

2. Overall management of correctional health care systems should include the following:

   - Precise tracking of all outside referrals and hospitalizations.

- Clearly defined utilization review and active medical direction by the Chief Clinician.

- A management team approach, or at minimum, integration and input from all disciplines rather than autocracy.

- Strong proactive contract negotiation to procure competitive hospital rates and contractual outside services.

- Utilization of on-site specialty clinics where applicable.

- Establishment of an accounts payable system with systematic review and monitoring of bills.

- An acceptable linkage and reporting structure to the Detention system to facilitate a cooperative relationship.

NURSING

The surveyed sites had various methods in place to decrease unnecessary costs and improve access to care.

- Nursing Management was enhanced by the availability of on-site charge nurses during the off-hours. This relieved some of the on-call burden from the Nurse Manager and improved communication. Administrative issues could be addressed promptly and the staff had a resource person available.

- The types of staff utilized varied considerably as did the Individual State laws governing the staffing of NA's, EMT's, LPN's, RN's. A separate study of the variations governing state practices would be helpful.

- The use of the OTC log seemed a concise way to record the administration of allowed OTC medications. This way doses were recorded in a brief, systematic manner without the need for extensive chart documentation. Ideally this could be used in conjunction with criteria for the administration of these OTC's.

- Clerical functions were generally that of filing and retrieving current and inactive records. The best staffing method would be one that used Unit Clerks to transcribe orders and had a sufficient number of File Clerks. A clerical or nursing position was very beneficial for the scheduling of off-site appointments and coordination with detention.

- Computerized sick call scheduling was a definite asset to the system. The computers aided in tracking which ultimately increases continuity of care. Computers would also be helpful if connected to laboratory services for rapid results and one day utilized for documentation in place of the conventional medical record.

- The availability of some type of medical personnel to perform the intake screenings was a good way to identify medical and psychiatric problems upon booking. This was most easily accomplished when the length of stay in intake was brief. A shortened stay in intake demands less time from the medical staff in providing extended patient care.

- Triage at the housing unit seemed like the most efficient way to handle inmate medical complaints. This was most successfully accomplished when space was provided for the medical staff to interview or examine the patient. Assigning the same personnel to the same units on a regular basis increased consistency, and decreased manipulation. It also promoted "ownership" and responsibility. The use of nursing triage protocols further accommodated the inmates' needs to reduce the number of provider visits.

- The utilization of appropriately trained RN's to perform routine health appraisals increased provider availability to see those inmates with medical problems. This also enabled the staff to complete physical exams in a timely manner.

- The availability of specially vented infirmary rooms allowed for the housing of active TB patients. This reduced inpatient hospital costs, if applicable.

- On-site specialty clinics drastically reduced the need for off-site referrals. This saved time and money in transportation as well as expediting service to the inmate.

Surgery and Anesthesiology

PHARMACY

- Establish a prime vendor contract for optimum pharmaceutical rates.

- Automate pharmacy for efficiency and utilization review data, such as prescribing practices and costs.

In conclusion, cost-effective health care in a correctional setting is directly impacted by the level of services provided by the pharmacy department. Many correctional health systems are "provider driven"; prescribing medications impacts staffing levels of nursing, as well as pharmacy.

Additionally, supplies, budgets for pharmaceuticals, medical equipment, and office materials are directly impacted by prescribing practices.

Ideally, correctional health systems should direct considerable effort toward building a complete pharmacy program which can provide effective cost-control through a pharmacy and therapeutics committee. This committee would be the deciding authority for adding and deleting medications from the formulary and would set policies on medication administration procedures and treatment protocols. The pharmacy and therapeutics committee would provide ongoing drug utilization reviews, resulting in the most cost-effective delivery of health care, as well as forcing provider accountability.

Judging from many of the sites surveyed, little emphasis has been placed on pharmacy services. Many systems have been content with utilizing a stock bottle method of drug distribution, with minimal professional pharmacy services provided. Although at first glance this method appears to result in cost savings by reducing the need for extensive pharmacy coverage and sophisticated unit dose equipment, quite often the opposite occurs. In this case, a twist on the old adage may result: "A penny saved is a dollar lost"... This is due to the fact that with this method of drug distribution there is little or no monitoring of prescribing practices or drug utilization. The provider simply orders the medication and the nurse administers it, with no effective monitoring devices in place.

On the other hand, the unit dose method of drug distribution offers a close scrutiny of all medications prescribed, as well as a built-in checks and balances system for accurate medication administration. Admittedly, this system is more work-intensive, but this virtually waste-free, low inventory system can save untold budget dollars in the long run.

A combination of unit dosing and multi-dose is recommended. Specifically, commonly used medications such as antibiotics may be administered in 10-14 day "keep on person" packages. All controlled substances must remain unit dose.

Pill lines reduce the amount of nursing staff required rather than requiring nurses to visit housing areas three or more times per day.

Computerization of the pharmacy department also provides greater cost controls by means of statistical drug utilization reviews. Effective software programs provide many cost control measures, forcing accountability of prescribing by providers, by sites, and by population groups.

Ordering mechanisms also provide a source of cost control. The prime vendor method offers significant savings by obtaining the lowest possible contract prices available from various pharmaceutical companies. Significant time savings is

realized in ordering from a single vendor. Inventory reduction can be realized through this ordering mechanism by reducing the paperwork involved, as well as increasing the frequency of ordering.

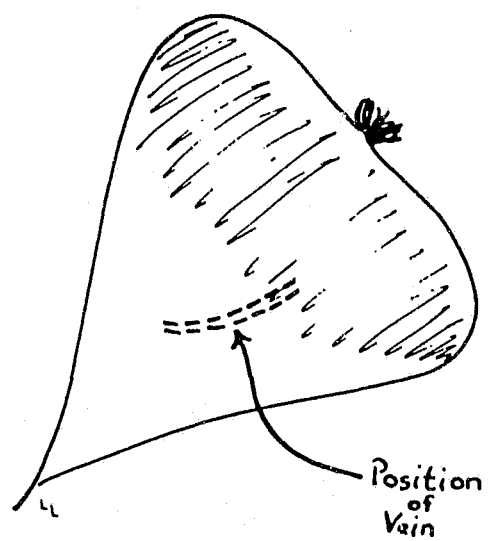
Without the availability of a centralized medical unit, decentralized pharmacy services would provide several distinct advantages. The necessity of intensive courier services would be reduced, due to additional satellite pharmacy locations. Medications would be dispensed to the inmates in a more timely fashion, reducing the need for large stock supplies at each clinic. Most significantly, satellite pharmacies would provide much closer monitoring of clinics and drug distribution, as well as better communication between pharmacists, providers, and nurses.

The ideal correctional pharmacy would therefore be one having the following:

1. Unit dose drug distribution
2. Computerization
3. A strong Pharmacy and Therapeutics Committee
4. A prime vendor contract for purchasing pharmaceuticals

With all of these mechanisms in place, the most effective cost control can be realized.

VII. GUIDELINES AND WORKBOOK FOR REVIEWING YOUR HEALTH CARE COSTS



How to Get Blood from a Turnip.

1. STANDARD OF CARE

It is necessary to decide upon a standard of care. **Quality of care is the first decision to be made which will set the tone for budget planning.** The level of medical care which you deem acceptable will create the base budget, and the standards by which you can design clearly written policies and procedures.

Two national organizations which define standards for accreditation are the National Commission for Correctional Health Care and The American Correctional Association (ACA). These are standards which are acceptable nationwide and provide a safe, legal basis for delivery of health care. Statewide standards, such as the California Board of Corrections define minimum health care standards for local detention facilities.

You may feel that accreditation will cost you more in staffing and services which exceed minimal guidelines but you are more likely to save dollars from diminished lawsuits and liability. Scrutinize your levels of care for realistic cost-effectiveness, and be sure that Detention and Medical are clear and in agreement on the level of care which will be provided.

Administrative commitment from Detention is essential to support and implement an effective medical program. Review any philosophical differences or incompatible standards within your system which may interfere with the medical practices. Develop strong advocacy for the medical staff. In addition, a poor working environment or continual conflict is going to cost you in lowered morale, sick time usage, turnover and recruiting difficulties.

2. WHAT ARE BARRIERS TO DELIVERING COST EFFECTIVE HEALTH CARE?

1. **Space - does lack of space create costly provider downtime? Is there adequate holding space for inmates? Which is more beneficial to your system - having the inmates come to the medical provider or having the medical staff go to them? Look at the pros and cons. Do you provide one-on-one operations which could be done more efficiently in a group; e.g., patient education, orientation?**

IDENTIFYING BARRIERS AND HIDDEN COSTS TO HEALTH CARE

Special Barriers (List inadequacies):

Where:

Problems Created:

Recommendations:

3. **UPDATED TECHNOLOGY AND TIMESAVING EQUIPMENT**

will reflect dollar savings. Determine usage and volume to decide if leasing or contracting equipment will be less costly for you. Technological improvements and changes in equipment are rapid and may not be worth the cost to purchase outright.

Automation will streamline the tracking functions for medical staff to increase access to the inmate population. The medical department should have prompt access to inmate housing changes. Many of the systems reviewed wasted valuable time in locating inmates and arranging for them to be brought to the medical staff.

Technology (Define equipment that can save you time/enhance patient care)

How do you track inmates through the system?

4. **STREAMLINE FUNCTIONS AND DUTIES OF THE MEDICAL STAFF.** Do not have licensed medical staff perform a job that can be done by officers or paramedical personnel.

Does the medical staff have responsibility for non-medical issues? Do they administer items that can be obtained in commissary? Are they involved in grievances and behavior problems which are custody in nature?

Inmate Grievances

Appropriate Complaints: # per month _____

Inappropriate: # per month _____

Number of staff hours

consumed per month: _____

Problems/Solutions Identified

*Review policies on commissary, forensic evidence gathering, behavioral problems, formal grievance mechanism, and OTC medications.

5. **HOW EASILY AND SWIFTLY CAN CONFLICTS BE RESOLVED** between Medical and Detention? Are there formal liaisons or negotiation mechanisms in place? Communication is the best tool for expedient, cost-effective health care delivery.

6. **DOES THE MEDICAL DIRECTOR OR ADMINISTRATOR** notify Detention of costly, excessive patient care problems? Is there systematic tracking of outpatient referrals and hospitalizations?

Develop tracking/reporting strategies to monitor hospital stays and costs. *(See Appendix)*

ER referral log.

Internal departmental tracking

Outside referral log.

Hospitalization status of patients to Detention Commander.

Divide the number of consults by the number of MD encounters.

Outside consultations (excluding emergencies) should be within 5% or less of the total encounters.

Specific provider encounter data will allow your Medical Director to review productivity, referrals, prescribing practices and daily workload.

7. **TRIAGE/SICK CALL.**

Are officers helping or hindering the volume of sick calls? The caliber of their training and the level of officer interaction with the inmate impacts sick call.

The percent of inmates at daily sick call should not exceed 15%.

Inmate idleness, lack of inmate programs, and recreation will impact the volume of sick calls as does over-crowding and frequency of assaults. An effective classification system will reduce inmate assaults.

Are inmates reinforced by coming to sick call? Review the waiting time and accommodations; e.g., smoking and socializing may be a secondary reward of sick call.

8. **DOES EVERYONE COME TO SICK CALL WHO ASKS?**

Review your triage practices. Do nurses go to the housing units? This practice has been effective and beneficial in weeding out those who do not need to come to sick call.

Who conducts sick call. RN's should screen and refer inmates to physicians or mid-level providers. We do not recommend that triage be performed at an LVN or LPN level.

Triage: Avg. # per day: _____

Who: Frequent complaints

problems seen _____

When:

Percentage of inmates at daily sick call:

Is it greater than 10-12% of ADP?

9. <u>ONLY THOSE INMATES SCREENED BY A NURSE</u> should be seen by an MD. Provide thorough orientation to MD's and PA's. Good medical leadership is essential to avoid unnecessary charges. Train and monitor the medical staff regarding liability, case law and internal due process. **Many correctional health care costs are inflated due to fear of litigation resulting in unnecessary testing and referrals.** Administrative support and good medical judgment will protect doctors from this litigious population.

10. **EXTERNAL COSTS** - review all costs and charges for ER, laboratory, x-ray, and hospitalization. Establish written contracts and negotiated rates for hospital and ambulance costs. Keep accurate records and statistics on all in-house services (See Appendices)

11. **REVIEW THE TIMING** in carrying out your health care services. Your release rate should indicate what percent remains in jail after two days, five days, and ten days.

If you conduct the 14 day PE, determine whether or not you should wait as long as possible or capture incoming patients at intake/booking. (See Sample Release Rate Table 5)

12. **PRESCRIBING PRACTICES SHOULD BE REVIEWED**, particularly psychotropic medications. Do your providers prescribe sleeping pills or psychotropics for behavior control? Develop policies and monitors to address your philosophy of treatment.

13. **REVIEW PHARMACY POLICIES AND PRACTICES.** Does your system distribute by unit dose or multiple doses? Large jail systems may want to limit unit dosage to particular narcotics and psychotropics only. A combination of both will be less staff intensive and allow multiple doses on commonly used benign medications.

Pharmacy automation will provide excellent record keeping with minimal manpower.

Do you purchase pharmaceuticals at cost through a prime vendor contract? Obtain the best possible contract rate on pharmaceuticals.

14. **INVEST IN QUALITY ASSURANCE STAFF AND UTILIZATION REVIEW.** Full time Q.A. practices will ensure that the standards which you set are being met. Systematic monitoring and built-in cost controls will ensure against uncontrolled spending. Monitor all charges and bills. It is a worthwhile investment to hire clerical support to review all invoices and provide fiscal accountability.

15. A NATIONWIDE NURSING SHORTAGE may affect your organizational plan and require a review and revision of duties. Nursing salaries and benefits have become competitive within the last few years and this is an area which requires creative recruitment. Evaluate your employment package if you are having difficulty filling nursing positions. The diversity of options in the Appendix may help you to enhance job attractiveness.

APPENDIX

NURSING EMPLOYMENT BENEFITS

NATIONWIDE DIVERSITY

A. SALARY

1. Differential: 10-20%, evenings-nights, up to 15% for weekends.
2. Merit Increases: at 1000 hours, 2000 hours, and subsequently each 1900 H of service thereafter.
3. Reimbursement for interview expenses.
4. Salaries commensurate with experience.
5. Bonuses for night, weekend, holiday, on-call and bail out shifts.
6. Quarterly attendance bonus program.
7. Time and a half for 12 hour shifts.
8. Referral bonuses.
9. Bonus plan for each 80 hours worked.
10. System of advancement, steps for position and salary advancement.
11. Buy back sick leave/vacation program.
12. Double time/time and a half on holidays.
13. Day care reimbursement.

B. HEALTH CARE BENEFITS

1. Disability: long and short term.
2. Choice of medical plans.
3. Dental plan.

4. Free hospitalization.

5. Vision plan: eye exam, glasses.

6. Selection of personal benefit package to meet individual needs.

7. Free prescriptions.

C. VACATION, SICK LEAVE, AND HOLIDAYS

1. 3-5 weeks of paid vacation annually.

2. Paid leave - 37 days per year.

3. Additional personal leave days - 2-3 per year.

4. 8-15 paid holidays per year.

D. MISCELLANEOUS BENEFITS

1. Malpractice insurance.

2. Baylor Staffing plans work 2 (12 hour) shifts per weekend and receive pay for 32-40 hours.

3. Tuition reimbursement: $1,500-$5,000 annually.

4. Discounts for public transportation.

5. Sick child care program.

6. Employee wellness program.

7. 8, 10, or 12 hour shifts.

8. Retirement Plans: Tax sheltered annuity, deferred compensation, paid non-contributory pension plan.

9. Work 6-9 months annually, receive pay over 12 month period.

10. Direct deposit.

11. Parking: free, covered.

12. Maternity/Adoption paid leaves.

13. Relocation assistance.

14. Employee Assistance Program.

15. Paid Jury Duty leave.

16. Housing assistance.

Health Care Grant Survey

CORRECTIONAL HEALTH CARE SURVEY

SITE SURVEY

Jail System

Medical Contact Person

Title

Address

Telephone Number

City, State

Jail Administrator

Telephone Number

NIC GRANT 90J01GH

Survey Conducted By

Dates

TABLE OF CONTENTS

I. ADMINISTRATION

Interviewer _____

Title _____

Define Organizational Structure of the Health Services

_____

_____

_____

_____

_____

_____

_____

Physical/geographical description of facility(ies) and total numb of inmates by facility (male and female).

1. _____

2. _____

3. _____

4. _____

Total Number of Female Inmates _____

Total Number of Male Inmates _____

Total Number of Inmates _____ ____

Include only those populations where they are responsible for thei medical care.

Total Number of Facilities _____

Number of 24-hour nurse stations/clinics_____ and where _____ eg. Intake, Outpatient Clinics.

List Specialty Clinics, Locations and Frequency:

ADP _____.

Average number of new inmates booked daily _____.

Average length of stay for inmates _____.

Design Capacity_____ (Is it holding more inmates than designe for?) Yes_____ No_____

Notes: _____

_____

_____

_____

II. BUDGETARY

Annual Health Services Budget

1988-1989 _____ Amount Budgeted.

_____ Actual expenditures (include off-site hospita costs).

1990-1991 _____ Amount Budgeted

Fiscal Year Begins _____

Are your off-site hospital rates pre-established or based on p person?

What are your off site costs based on: Medicare rates, Indigen per capital, line item etc.? _____ or
Other _____

Total Cost Breakdown for Current Year

Personnel _____

Benefits _____

Hospital Inpatient _____

Outpatient Services _____

Emergency Room Costs _____

Special Contracts_____ _____

Transportation Costs_____

Lab/X-Ray Costs_____

Pharmaceuticals_____
(Meds Only)

Administrative Costs_____

Central Supplies_____

Other Costs_____

Collect any data available.

How is the billing processed, eg. who monitors individual patie bills?

_____

_____

_____

_____

_____

_____

_____

_____

_____

BUDGETARY (CONTINUED)

Do You Have A Further Breakdown Of On-Site Costs By Service?

Physician Services_____

Nursing Services_____

Pharmacy Services_____
(Total Services)

Dental Services_____
(Total Services)

Medical Records_____

Inservice Education_____

Psychiatric Services_____

Other_____

Notes: _____

_____

III. PERSONNEL

Total Number of Staffing _____ (Include contractua
(Include mental health staff if it is part of their budget)

	BUDGETED FTE	SALARY RANGES	BENEFIT INCLUDE Yes
Administrator			
Asst. Administrator			
Other			
Medical Doctor			
Physicians Asst.			
Nurse Practicioner			
Dentist			
Dental Technician			
Pharmacist			
Pharmacy Tech			
Radiologist			
Radiology Tech			
Lab Tech			
Registered Nurse			
LPN/LVN			
Nurses Aide			
Unit Clerk			
Secretaries			
Office Manager			
Courier/Driver			

	BUDGETED FTE	SALARY RANGES	BENEFI INCLUDI Yes
Nutritionist/ Dietician			
Therapists, OT, PT, Etc.			
Medical Records Clerk			
ART, RRT			
Other			
Specialists (On-site Only)			
Psychiatrists			
Psychologists			
Counselors			
MSW			
Aides			
Other			
Other			
Other			
Notes:			

IV. SERVICE DELIVERY STATISTICS

Number of inpatient beds (On-site)_____

Medical_____ Male_____ Female_____

Psychiatric_____ Male_____ Female_____

Number of Admissions: 89/90_____

90/91 to date _____

Average Daily Census_____

Average Length of Stay ___ (Inpatient)

Comments: _____

Hospitalizations (Off-site) Average Cost per Day_____

Total 89/90_____ 90/91_____

Average Length of Stay_____

Do you have a monitoring mechanism for costs? Explain:

_____

_____

_____

_____

_____

_____

_____

Breakdown

Medical _____

Surgical_____

Communicable_____

OB/Gyn_____

Other_____

Comments:_____

_____

Nursing

Define administrative nursing structure:_____

_____

_____

_____

_____

_____

_____

Is licensed nursing staff available on-site 24-hours per day?

RN_____

LPN_____

BOTH_____

Who administers medications? RNs, LVN, Other?

_____

_____

_____

_____

_____

_____

_____

_____

_____

Who performs the following clerical functions?

Licensed Nursing Staff	Clerical	
_____	_____	Open Charts
_____	_____	File Charts
_____	_____	Pull Charts
_____	_____	Monitor, Track Appointments, Physicals, Etc
_____	_____	Make Off-Site Clinic Specialty Visits
_____	_____	Transcribe Medical Orders
_____	_____	Check Outdated Materials, Drugs
_____	_____	Other_____

Notes: _____

Are nurses available for intake evaluations?

24-Hours per Day?

Describe intake screening process and who does it?

An Officer _____

An R.N._____

An L.P.N._____

Other_____

Description_____

_____

_____

_____

Transportation:

Who transports inmates to routine specialty clinics.

Outside Hospitals.

Emergencies.

Describe use of Ambulance _____

_____

_____

Do you transfer medical charts with the patient? Explain

_____

_____

Describe the following:

On-site patient care: eg. Intake, Clinic, Infirmary _____

_____

_____

_____

_____

_____

_____

_____

_____

Availability of on-site MDs:
(Hours, On-Call, Etc.)

Triaging/Tank Slips

Sick Call (Describe Process)

Who conducts 14-day health appraisals?

Describe Medication Administration

(For both prescribed medications vs. OTC meds)

Scope of Clinical Duties performed on site.

(eg. Casting, Suturing, Renal Dialysis)

Do you perform on site x-rays, lab services?

(Describe each area)

Use of medical/nursing protocols, do these include prescri
drugs, can prescription meds be started without Dr. Approval?

Explain each area in detail:

Are prenatal services provided on site or thru special clinic?

Describe scope of services including any educational classes i
prenatal care.

List other areas of service your health care personnel provide su
as training or assistance in non-medical areas:

What is the acuity levels of paients in Infirmary:

TV's

Heart monitors

Brittle diabetics

Parapalegics

Quadropalegics

Notes: _____

_____

_____

_____

_____

_____

Pharmacy Services

Location of Pharmacy and hours of operation?

If not 24-hours, method of handling emergencies?

Contracted number of Pharmacy hours on site?

What is your method for drug distribution?

Explain: _____

_____

_____

_____

_____

Are psychotropics given in liquid form?

Order procedures: Wholesale vs. Direct (Where do you get y stock?)

Notes: _____

_____

_____

Equipment:

Computer _____

Unit Dose Machine _____

Label Machines _____

Packaging Machine _____

Other_____ _____

Do you keep drug profiles? Inventory of current drugs inmate on. (This is a history of previous drug use by individual patie as a filling tool)

Number of new prescriptions filled per day _____, per month _____ ? (Define if new prescriptions only or refills)

Total number or percentage of inmates on medication?

Number of inmates on Psychotropic meds?

Do you have an automatic stop order, eg. 30 day limit?

Describe process: who reactivates? _____

_____

_____

What happens to medication that an inmate brings into the jail? you allow the inmate's personal meds to be used? Descri procedure: _____

_____

_____

_____

_____

Do you have a formulary, obtain copy.

Do you allow non-formulary meds, if so, describe procedure:____

_____

_____

_____

_____

Describe method of transporting prescriptions if multi facilities:_____

_____

_____

_____

Do you have a pharmacy and therapeutics committee? Describe: _

_____

_____

What is your monthly volume of AZT?

Pentamidine?

Give an overview on patient care provided on-site. Include observations and summarize site reviews:_____

Assorted Forms

PRISON HEALTH SERVICES INCORPORATED

Consultation/Emergency Room Referral

Date: ____/____/____

From: _____
(Referring Physician/Institution)

_____

To: _____
(Consulting Physician/Address)

_____

Inmate's Name: _____

Date of Birth: _____

Social Security #: _____

Chief Complaint: _____

_____

Bill direct to:

PRISON HEALTH SERVICES, INC
101 Lukens Drive, Suite A
New Castle, DE 19720

PRISONERS PLAN ESCAPES!

DO NOT inform prisoners of the date/time of revisits or impending hospitalization.

ER PHYSICIANS: If hospital admission is recommended, please notify PHS beforehand.

Name: _____

Phone: _____

Pertinent History: _____

_____

_____

T _____ P _____ R _____ B/P _____

Financial Responsibility _____ Policy # _____

Include Other Information: _____

_____

PHYSICIAN'S REPORT

Significant Findings, Including Tests Done: _____

_____

Diagnosis: _____

_____

Orders/Recommendations: _____

_____ _____

_____ _____

01-115 (1/90) M.D. Signature _____ _____ Date ____/____/____

HEALTH RECORD

PRISON HEALTH SERVICES, INC.

OUTSIDE REFERRAL LOG

Program Administrator: _____

Site: _____

Week Of: _____ /____/ _____

DATE OF SERVICE	INMATE'S NAME	REFERRED TO	AUTHORIZED BY	DIAGNOSIS/PROBLEM	THIRD PARTY PAYOR	OTHER

TOTAL HEALTH CARE SYSTEMS

PRISON HEALTH SERVICES, INC.
1200 PHILADELPHIA PIKE
WILMINGTON, DELAWARE 19809

DATE:

TO: Major Corbett

FROM: Valerie Mindle, Head Nurse

SUBJECT: INFIRMARY REPORT/IN-PATIENT HOSPITALIZATION

CENSUS IN THE INFIRMARY_____MALES_____FEMALES_____

Shelter Care _____

Medical _____

Surgical _____

Detox _____

Ortho _____

AT BROWARD GENERAL HOSPITAL:

OTHER:

CORRECTIONAL HEALTH SERVICES

pharmacy statistics
FY 91-92

FACILITY		JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE
1st Avenue Jail	Ambulatory												
	Psych												
	Total												
Durango Jail	Ambulatory												
	Psych												
	Total												
Estrella Jail	Ambulatory												
	Psych												
	Total												
Towers Jail	Ambulatory												
	Psych												
	Total												
Juvenile Center	Ambulatory												
	Psych												
	Total												
Infirmary	Ambulatory												
	Psych												
	IV												
	Total												
Madison Jail	Ambulatory												
	Psych												
	Total												
Grand Total													
Avg. Per Day													

MADISON RADIOLOGY SECTION

WORK SUMMARY

CORRECTIONAL HEALTH SERVICES

Year_____

MONTH	CHEST: PA	CHEST: PA & LAT	RIBS	C SPINE	T SPINE	L SPINE	SACRUM, COCCYX	ABDOMEN	FOOT, TOE	ANKLE	LOWER LEG	KNEE PATELLA	FEMUR, HIP, PELVIS	FINGER, HAND	WRIST	FOREARM	ELBOW	HUMERUS	SHOULDER	CLAVICLE, A-C JTS, SCAPULA	SKULL	SINUSES	FACIAL BONES	ZYGOMA, NASAL BONES	MANDIBLE	OTHER	TOTAL PROCEDURES	TOTAL PATIENTS	TOTAL FILM USED	TOTAL EXPOSURES	TOTAL WASTE FILM	WORKING DAYS	AVE. PROCEDURE PER PATIENT	AVE. PROCEDURE PER DAY	AVE. PATIENTS PER DAY
JAN																																		
FEB																																		
MAR																																		
APR																																		
MAY																																		
JUN																																		
JUL																																		
AUG																																		
SEP																																		
OCT																																		
NOV																																		
DEC																																		
TOT																																		

CORRECTIONAL HEALTH SERVICES
MADISON STREET JAIL
DENTAL CLINIC

STATISTICS FY: _____

MONTH	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOT
Total Patients Appointed													
Total NO SHOWS													
Total PATIENTS SEEN													
Emergencies													
Referrals													
CHARTING													
BITEWINGS													
PERIAPICALS													
CONSULTATIONS													
RESTORATIONS													
PIN BUILD UPS													
BASES AND LINERS													
Temporary Fillings													
Root Canal (In Progress)													
Root Canal (Completed)													
.prosthetic adj., repair													
Recement Crowns / Bridges													
Simple Extractions													
Surgical Extraction													
Biopsy													
Post-Operative Treatment													
Sutures Placed													
Sutures Removed													
Prescriptions Written													
Other													