HOSPITAL MANPOWER/STAFFING ASSESSMENT ON GUAM

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ABSTRACT

A comprehensive study of manpower and staffing at the facilities operated by the Guam Memorial Hospital Authority (GMHA), which encompass the former Medical Center of the Marianas (MCM), the old Guam Memorial Hospital, and the Mental Health Facility, indicates that some departments are understaffed and others are overstaffed.

Overall staffing, however, does not appear to be out of line. The ratio of full-time employees (FTE) to occupied beds is approximately 3.4, which compares favorably with ratios in several mainland hospitals.

Departments in need of increased staffing are: laundry and linen service, electronic data processing (EDP), and maintenance (especially bio-medical repair). Reductions in staff, or inter-departmental transfers, might be possible in the following areas, subject to upgrading of employee skills and other actions recommended for improved efficiency: cafeteria, housekeeping, payroll, accounting, pharmacy,laboratory and pathology, admitting, and Mental Health administration.

The study highlights several problem areas which call for investigation and action on the part of Guam health and/or hospital officials, namely: the lack of a preventative maintenance program for hospital equipment; the disproportionate number of nurses aides, as compared to the number of professional nurses; the lack of a training program for upgrading skills of nurses aides; the under-utilization of EDP facilities, especially in the areas of inventory control and accounting;

and the dysfunctional design and layout of the new hospital building, notably, the absence of a full-service kitchen, the placing of the emergency ward on the second floor, and the separation of the maternity and post partum wards.

Operating problems of GMHA are exacerbated by the physical separation of the various facilities and by the lack of legal authority to enforce collection of accounts receivable, which currently amount to approximately $8 million.

The study includes an analysis of the strengths and weaknesses of each department, together with suggestions and recommendations for improved performance in certain areas. Recognition is also given to the numerous functions which are being carried out in a highly creditable fashion, often under sub-optimal conditions.

PREFACE

The development of standards for use in determining and assessing health and ancillary manpower needs in a local area is an extremely difficult undertaking. To date, no single method of measuring such requirements has proven to be entirely satisfactory.

Parameters which make the development of manpower standards difficult are the changing economic status of any given population group; the availability of health care delivery mechanisms; health needs -- real or perceived utilization of health care delivery systems; and vacancies in the health care delivery systems.

This study, which was conducted by Professors Richard N. Prelosky and Don C. Warner, was contracted for by the Guam Health Planning and Development Agency with the Community Development Institute of the University of Guam. One of the purposes of the study was to seek an answer to the question, "Is the Guam Memorial Hospital overstaffed?" The answer to that question cannot be stated as an unqualified "yes" or "no," since the study indicated that certain departments are understaffed, and others are overstaffed. Only by examining each performance area separately, and following the recommendations given, can a satisfactory solution to the GMH staffing problem be arrived at.

Introduction

The Guam Memorial Hospital Authority (GMHA) was established as a semi-autonomous agency to operate the Guam Memorial Hospital and the Guam Community Mental Health Center. Facilities include the Mental Health Facility, which is located on a cliff overlooking Tumon Bay. The buildings currently being occupied are former residential buildings which were at one time used for hospital staff housing. The former Guam Memorial Hospital, hereinafter referred to as the "old facility," is located in the same geographic area and is currently being used to house certain of the active services of the hospital authority, including bed spaces.

The current main Guam Memorial Hospital, referred to as the "new facility," is located in Tamuning village. It was built and operated originally by the Arch Diocese of Guam. After a short period of operation, the Catholic Diocese suffered financial problems and action was undertaken by the Government of Guam to purchase the facility. After a lengthy period of negotiations, Federal support was received in the form of a grant of approximately twenty five million dollars to permit purchase of the facility by the Government of Guam.

It is noted at this time that the Hyatt Management Corporation was engaged to provide management direction to G.M.H.A. This contract was originally designed to cover the old facility but has since been expanded to include the new facility as well.

The hospital authority maintains a bed capacity of 223, with sixteen being utilized for the skilled nursing facility, seventeen for mental health and forty-three for the intermediate care facility.

Attached as appendix (C) is the current allocation of beds as distributed by service. Appendix (D), provided by the Medical Records office of the hospital, is a record of operations covering two twelve-month periods. The first, which was prepared as of June 30, 1978, is a copy of a monthly comparative report which covers the period from July 1, 1977, through June 30, 1978. This report reflects a slight decrease in the number of overall admissions to the facility, although some services do reflect increases. Overall occupancy of 78.13%, as compared to the previous fiscal year rate of 81.38%, reflects a 3.25% reduction in occupancy. It is noted that the number of operations increased overall by 5.69% with an increase of 13.22% in minor operations and a decrease of 3.47% in major surgical procedures. The total of 30,847 outpatient visits was a reduction of 10.89% which is completely overshadowed by a dramatic 52.41% increase in emergency visits.

The comparative monthly report for the period ending June 30, 1979, reveals an increase in the number of days of care rendered. A striking increase of 27.03% in operations was recorded, with increases of 26.17% in major and 21.77% in minor procedures. The number of outpatient visits showed a slight increase, 6.51% and decline of 12.22% in emergency

visits. The rate of bed occupancy was determined to be 78.98%, a less than one percent increase over the previous twelve-month period.

Methodology

Time constraints precluded the applications of accepted engineering standards which would have permitted a complete detailed examination of work flow, paper flow, time utilization, and space time coordinates and relationships.

The techniques used included interviewing of supervisors in the service areas and observation of work performance. Also evaluated was the work performance area. Topics discussed with supervisors included number of employees, qualifications, turnover, productivity, distribution - including shift work, absenteeism, and cooperation from other hospital areas. This list is not all-inclusive; each area examined will be commented on separately.

Interviews of hospital administrators of the Good Samaritan Hospital System, Phoenix, Arizona, were conducted prior to commencement of the Guam Survey. These interviews provided data and methodology for the survey.

Acknowledgments

The authors at this time wish to acknowledge the high spirit of cooperation that was exhibited by the several areas of the Guam Memorial Hospital Authority. This spirit of deep interest and concern made this task very pleasant.

Constraints

It must be recognized that constraints on the recruitment, hiring and dismissal of employees will affect the eventual outcome of the interpretations of the findings of this report. Another constraint that must be considered is the financial status of the hospital and the Government of Guam.

Diet Service

This organizational entity has a staffing allowance of 31. This number includes the Chief Dietician and the Therapeutic Dietician. The Diet Service also has on a part-time basis, a dietician who serves as a consultant.

The diet service is charged with providing meal service to the patients housed by the hospital authority. It also operates a cafeteria which provides fast foods to staff and visitors.

This service operates in both the old and new facility. In the old facility, a staff of 14 provides meal service to the patients housed there. These are primarily those housed in the intermediate care facility and in the mental health ward. The staff of 14 workers is on a seven day per week, two-shift basis, and prepares and serves approximately 360 meals per day. This work crew labors under the handicap of antiquated equipment. The staffing of the old facility food-service area is not considered to be excessive.

The new facility has the balance of the staff allowed. This facility receives meal service from a private contractor. Meals are delivered, taken to a food-service heating station in the ward area, where the meals are heated in a micro-wave oven, placed on carts, and then delivered to the wards for distribution by the nursing staff. The food distribution includes the special diets required. These diets number approximately 50 per meal, according to patient needs.

The cafeteria is operated by utilizing personnel assigned to the diet service and functions on a seven day per week basis.

The requirement for a contractor to provide meal service is necessary because there are no kitchen facilities in the new hospital building. The cafeteria operation cannot be counted as a kitchen facility because there is no usable capacity for mass feeding operations. A serious concern over the lack of a kitchen facility is expressed because of the high potential for natural disasters on Guam and the danger that food-service could be interrupted. Not to be discounted is the possibility of a man-made accident that could also disrupt food-service operations.

It is felt that an appropriate study should be made for a determination of whether to either construct necessary addition to the new facility to provide for food preparation, storage, and cleaning facilities or to upgrade the present equipment at the old facility, if it is to be permanently retained as part of the hospital authority, to provide for meal preparation for both structures.

Another consideration that must be made is one concerning the operation of the cafeteria. It is strongly suggested that operation of this facility be provided through award of a contract to a concessionaire. Such a contract should provide for rental of space, payment for utilities, and percentage of profit from operations. Use of this approach would allow a reduction in the number of employees required for the diet service.

If the addition of a kitchen facility at the new facility or the renovation of the kitchen facility at the old facility becomes a reality, it is estimated that the only new employees that would be required would be drivers for the vehicles to transport meals between the facilities. The number of drivers should not exceed three in number.

The awarding of a concession contract to a private firm would permit a reduction in the staff assigned to the diet service. This reduction would be in the number of cooks.

Laundry and Linen Services

This support group has 8 positions allotted to its operation. The group works in shifts and provides for delivery of linens to consumers on a regular and demand basis. Seven of the eight personnel assigned cover both facilities, while the other person is responsible for providing repair service for damaged and torn linens.

This unit is hampered in service delivery because of a shortage of linens in the hospital. The authors also feel

that the number of personnel assigned should be reviewed and that consideration should be given to the assignment of additional personnel to this unit.

The authors do not feel that a laundry unit need be placed in operation as there are several commercial services available.

Housekeeping

This unit has a personnel allowance of 36, distributed between both facilities.

It is felt that this unit is overstaffed by at least 6 people. A program designed by the Hyatt Management Corporation, which provided a methodology for cleaning the new hospital facility, including times for cleaning various spaces, clearly stated that a maximum of 24 people were needed to staff the hospital housekeeping unit. This number included the supervisor and a clerical staff person.

The number of persons cited above was considered to be sufficient to provide for a three-shift, seven-day per week operation.

In the old facility, it is felt that a properly supervised crew of six is sufficient to provide for the routine normal cleaning of spaces utilized for patient care.

Normal attrition is the recommended method of reduction in the number of people assigned to this service.

Maintenance

This unit has a personnel allowance of forty-two. At the time the interview was conducted, one position was vacant. The unit has a record of stability in personnel, and there does not appear to be a turnover problem.

One unit, the boiler operators, is on a shift basis. The staff of six maintains the boiler operations at both facilities. Other employees are on a standby basis for emergency service. For example, air-conditioning refrigeration mechanics, electricians, and plumbers.

The staffing pattern for this unit was originally designed to operate the old facility, but has since been charged with the performance of service in both facilities. Work is assigned on a job order basis. There is an apparent dis-satisfaction with the performance of this area by the other services. Each area seems to feel that it has priority, and that any delay is critical.

A complaint registered by many service areas is the lack of preventative maintenance. This is a vital service that can be assisted by the establishment of a complete inventory system in the data processing department.

A complete inventory of all equipment, with data such as procurement date, cost, and the manufacturer's recommended maintenance schedule, should be instituted immediately. All costs of repairs and service dates should be recorded to provide for a logical basis for replacement. For example, if

repair cost exceeds 50% of procurement, the item should be replaced. These types of records provide necessary information needed to justify a budget to the Board of Directors and the Legislature.

In the area of bio-medical equipment, it is apparent that no preventative maintenance is performed. This is because the bio-medical repairman must spend his time in repairing equipment and does not have the time for a P.M. program.

Efforts must be made to increase the number of bio-medical repairmen for a period of at least three years to place all equipment in a state of good repair, and to provide the basis for a good, continuing P. M. program. Computerized information would form the basis for this program.

One person is off-island receiving training in bio-medical equipment repair but is not expected to be available until 1981. This recognition of a need for a skilled technician is to be commended. However, more than one highly-trained person is needed to cope with the complex and sophisticated technology present in modern medical equipment.

Until an extensive rehabilitation program of the old facility is undertaken, it does not seem proper to reduce the number of employees in the maintenance section. It is felt that the present staff is sufficient to carry out service, with the exception of the bio-medical equipment repair section. The additional bio-medical repairmen that are needed could be

placed in positions currently identified as "trades helpers." Thus, no overall increase in staff would occur.

Nursing Service

The Nursing Service has a total personnel allowance of 249 positions. Eighteen clerical positions are provided,, with the balance of 231 being allocated to the varying degrees of acquired nursing skills.

Clerical positions are interpreted to include clerk-typists, administrative assistants, and ward clerks.

As of the date of the interview with the nursing office, it was indicated that 15 positions were vacant, with a majority of the vacant positions being professional nurses. Of the budgeted positions that were filled, 10 were occupied by professional nurses, 29 by licensed practical nurses, and 86 by nurses' aides.

The occupied positions breakdown demonstrates that 47% of the nursing staff are professional nurses, 13% are licensed practical nurses, and 40% are nurses' aides. The U. S. Surgeon General's Consulting Group on Nursing publication, Toward Quality in Nursing: Needs and Goals, PHS Publication number 922, February 1965, indicated that staff nurses in direct care units should have a proportional distribution of 50% professional nurses, 30% practical nurses, and 20% aides. The current situation on Guam reflects that in the medical unit the proportion is 40% professional, 10% practical and 50% nurses aides. The Surgical Unit shows 39% professional, 21%

practical, and 39% nurses aides. (Numbers will not equal 100% because of rounding). The OB/GYN service shows 33% professional, 28% practical, and 39% nurses' aides.

Although it is suggested that Hospitals have a nursing staff, including clerical positions, equal to 40% of the full time employees, this is a generalization that cannot always be applied. The nature of the facility and the location will have a direct influence on staff proportions.

Guam Memorial Hospital has, at present, approximately 41% of full time positions allocated to the nursing service. On the surface this would seem to be an ideal situation. However, a review of staff qualifications indicates that GMH falls below the optimum recommendations of the Surgeon General's report.

It is felt that an increase in the number of professional nurses is needed. This can be accomplished in several ways. The first, is to call for upgrading of the practical nurses and nurses aides through educational programs that will permit them to attain a baccalaureate level of education and become professional registered nurses. A second method is to have positions deleted from other hospital areas and assigned to the nursing service on a three for one basis and only fill these positions with fully qualified nurses. A third, but perhaps impractical way, is to implement a wage increase for nurses which would permit the recruitment of nurses who would not otherwise accept a position because of low pay. It must be understood that for each professional nurse position created a reduction in a nurse aide position must be made.

Accounting and Payroll

This service unit has a personnel allowance of 14. At the time of interview, one position vacancy existed.

The unit is split into two functions -- accounting and payroll.

The payroll department is responsible for accumulating data relative to pay earned for hours worked. Four people are assigned to this area. Paychecks are prepared by the data processing section for the staff of the hospital and the Mental Health Facility. This totals an average of 700 paychecks each pay period. The data processing area also maintains records on approximately 100 former employees for tax purposes. This workload was compared to the payroll section of the University of Guam. The University of Guam payroll department processes, on the average, 635 paychecks bi-weekly with only two staff personnel. Checks are again prepared by the Data Processing Center. Based on a comparison of the similarity of data processing equipment and approximate numbers of employees, it is felt that the number of people involved in payroll processing at Guam Memorial Hospital Authority could be reduced to two.

The accounting department has the other ten positions allocated.

According to the controller, much of the work performed in the accounting section is done manually. Since manual preparation of the many accounting reports is performed, the number of personnel assigned must necessarily be large. As will be noted in the comments on the data processing division,

the potential of data processing is not being utilized to its full capacity.

It is strongly recommended that immediate action be taken to have the majority of the necessary accounting functions transferred to a data processing system. Use of a computerized system for accounting would provide for more timely and accurate pictures of the hospital's financial condition.

Specific recommendations as to the number of personnel that could be effectively reduced in number would be able to be determined after full implementation of an electronic data processing system of accounting.

Data Processing Section

The utilization of the Data Processing Section of the Fiscal Services Division of Guam Memorial Hospital, though fairly extensive, appears to be sub-optimal. There are several areas in which computerization of procedures which are presently done manually, or mechanically, could be economically fruitful, with potential savings to the hospital of many thousands of dollars.

The Data Processing Section is presently staffed by a Data System Manager and 10 employees. Hardware is an IBM Systems 3, Model 15, computer plus peripheral equipment with both batch processing and on-line capability. It is currently being used 16 hours per day (two 8-hour shifts).

The schedule of Data Processing Reports indicates that the Data Processing Section is currently processing patient billing, accounts receivable, case abstracts, and payroll. Aging of accounts receivable is listed as being done by Data Processing, however, aging is also apparently being done manually in the Accounting Department. The latter is a duplication of work, if in fact, the Data Processing Section is doing the aging.

There are several other areas of accounting, such as accounts payable and general ledger, which could profitably be transferred to the Data Processing Section. In many public and private organizations, all accounting procedures are computerized, including printout of monthly financial statements.

However, the area which offers the greatest potential for immediate and future cost savings for Guam Memorial Hospital is inventory control. A large volume of expensive pharmaceutical, anesthesia, radiology, and other supplies flows through the hospital each year. The institution cannot afford either over-stocking or under-stocking of critical supplies. At present, there is little or no inventory control, except in the pharmacy. A modern, efficient, computerized system of inventory control could maintain inventories at optimal levels, thus preventing stockouts and at the same time reducing capital investment in costly supplies. The cost of carrying an item in inventory is generally from 10% to 30% of the purchase price of the item.

In order to computerize inventory control, a complete listing of all items normally stocked by GMH would need to be coded for input into the computer. This listing should include the following information for each item: Stock or I. D. No., description (brief), balance on hand, cost per unit, and total cost of balance on hand.

Next, an analysis of the past and projected future usage of each item would need to be made, so that the computer could be programmed to recognize minimum stock levels and initiate orders for purchase. Economic Order Quantities (EOQ) could be calculated by the computer for all items in regular, continuous use. Usage patterns would need to be constantly updated in order for the computer to recalculate EOQ's, minimum quantity levels, and reorder points, based on changes, if any, in usage patterns.

After implementation of the Inventory Control System, all future receipts and disbursements of listed items would need to be input into the computer so that up-to-date reports could be generated weekly, showing the status of each inventory item, its unit cost, the total cost of each item on hand, and the grand total cost of all inventory balances. This would provide invaluable information to management for inventory control.

Prior to implementation of a computerized inventory control system, a complete physical inventory of all supplies and equipment should be taken. In this regard, if the experience of GMH parallels the experience of many other

organizations which have instituted effective inventory control for the first time, cases of over-stocking, under-stocking, obsolete equipment and supplies, etc., would probably come to light.

In most organizations, accounts receivable and inventories are the two areas which cause the greatest cash flow problems. GMH does not appear to be an exception to this rule.

Computerizing inventory control and other accounting procedures might result in a small increase in number of Data Processing personnel, but this should be more than offset by reductions in the Accounting Department.

Purchasing

The purchasing department has an allowance of ten employees. At the time of interview one position was vacant.

Storage facilities for supplies and equipment are physically located in both the old and new facility. This decentralization of storage has some salutory advantage in that in the event of a disaster not all materials will be damaged. However, a problem surfaces in that there is only one vehicle assigned for use in picking up and transporting supplies. Pick up points include the airport, U. S. Naval Supply Depot, and other locations around the island. The problem is further compounded by the fact that one of the people normally assigned to the receipt function must double

as a driver, thus creating additional work for other personnel.

The storerooms are not identified as storerooms and items such as narcotics and alcohols or other dangerous drugs are not stored in the general stores area, but are immediately placed in custody of the pharmacy. The decision not to identify storerooms is considered to be a good protective device to prevent unauthorized entrance.

Perhaps the most severe problem faced by the purchasing/storage personnel is the lack of a computerized system of inventory. The current manual system of inventorying supplies is both time consuming and very costly. As pointed out in the comments on the data processing division a computerized inventory system will permit better management control and would serve as a method for conservation of monies.

After a computerized system is placed into operation, a re-examination of the staffing pattern should be made to determine if a reduction in staff is feasible. In the interim, it is recommended that the vacant position be converted to one that is identified as a driver/expediter.

Patient Affairs - Business Office

This unit has a personnel allowance of 21. At the time of interview, one vacancy existed. The unit is subdivided into two sections. One is the billing section and the other is credit/collection.

One position identified as belonging to the Patient Affairs Billing Office, the Accounting Technician II, is apparently being utilized by the accounting office for

considerable periods of time. Since this utilization is being made, it is apparent that no need exists for the position and it should be deleted.

The billing office does current billing only, utilizing data provided by the data processing center. However, because of untimely data, billings are not always current. It was stated that preparation of billings for medicare and hospital insurance users is time consuming.

The Credit/Collection Section works on a normal administrative work week basis. No shift or weekend work is performed. At the time of interview, it was stated that approximately eight million dollars are owed to the hospital. It was alleged that extreme difficulties, such as loss of contact with debtors, inability to enforce collection by a collection agency, and lack of an enforcement method to force payment of outstanding debts are contributors to this problem. Accounts are turned over to a collection agency 120 days after the account is due.

This unit also stated that poor feedback from the data processing section caused them to spend much time in manual preparation of credit statements.

A system that provides for collection of monies is the use of a voluntary agreement between the hospital and the patient, if the patient is a government employee, for the withholding of monies from the paycheck for transmittal to the hospital in settlement of the debt.

Data can be obtained from the computer area in a more timely fashion by the utilization of terminals for real time information. This rapid retrieval of collection information

would permit billings to be prepared and submitted in a more timely fashion.

The matter of the great loss in revenues because of lack of ability to collect is a very serious matter. It is suggested that the hospital seek to either have legislation created or, if present, strengthened to permit stringent enforcement of collection procedures. For example, those patients who do not pay on discharge from the hospital should be required to sign a mandatory payroll deduction form or a legally enforceable promissory note.

If computer services are upgraded through the use of terminals, a future examination of the service should be conducted towards a review of the workload and a possible reduction in staff requirements.

Patient Affairs - Admitting

This section has a personnel allowance of 18 and functions on a seven day operation with three shifts. The morning shift has five personnel, the afternoon shift has four and the night shift has two. The remaining personnel are worked in to cover weekends, holidays, and time off for other employees and supervisory activity.

The unit handles the admission and discharge procedures for patients. The time element for an admission is normally five to ten minutes if the patient arrives with doctor's orders. If the patient does not arrive with doctor's orders the time of processing must take 15 minutes or longer. The average rate of

admissions to the hospital is thirty per day with discharges averaging fifteen per day. Discharge time processing is approximately ten minutes.

Extrapolating the time required for a normal admission 30 patients by 10 minutes reflects that only 300 minutes per day are required for admission. The normal eight hour working day is 480 minutes and the additional time period would or could compensate for the extra time needed for the admission of patients without doctor's orders.

Discharge time of 10 minutes by 15 per day discharge provides for 150 minutes.

Additional time is consumed by admitting officer personnel in transporting the patient to the room assigned in that they take the newly admitted patient to the laboratory and the X-ray unit prior to being delivered to the room or the assigned ward. Time usage varies according to the workload of the department being visited. Other time delays occur in the admission of a patient when his assigned bed is not ready, requiring the patient to wait in the admitting area after the laboratory and X-ray examinations have been completed. This delay is attributable to several factors. The first is the communication gap that apparently exists between the ward and housekeeping wherein the ward personnel have perhaps not coordinated the cleaning schedule with housekeeping to have the room prepared immediately after the patient leaves.

Another factor causing a delay in room preparation is that patients will often remain in the room after discharge

to await pick up by a family member. This additional time of occupancy delays room preparation, hence, a delay in getting newly admitted patients to the ward.

Other time delays occur, according to admissions staff, when they are not notified of bed availability when a patient is discharged by death.

It is recommended that a system of having patients report prior to admission for the required laboratory and X-ray examinations that are part of the admission process be developed or that the responsibility for taking patients to those areas for examinations be shifted to the ward. This shifting of responsibility would provide for a reduction in the number of personnel required by at least 4. After the system has been in effect for a period of time a re-examination of staffing can be made with a view towards further reductions.

Pharmacy

This unit has a personnel allowance of seventeen, with two positions vacant at the time of interview. The staff members are assigned to a two-shift operational schedule, with normal operating hours being 6 a.m. to 12 midnight.

The pharmacy fills, on the average, 175 prescription orders per day. This number reflects a drop in the number of filled orders, which is attributed to the number of patients having orders filled by Health Maintenance Organizations.

The pharmacy uses a unit dose system on the wards and fills three to four hundred units per day. Emergency orders are filled and delivered. The pharmacy utilizes a technician

to serve the wards. This service is provided on an hourly basis.

The pharmacy does not have a computerized inventory system, and also has a problem in that price change information is not provided on a timely basis.

It is recommended that an inventory system be developed that will provide vital data such as economic order quantity, reorder points, safety levels, and total value. In connection with this, immediate posting of price changes to inventory records and providing new prices, as soon as possible, to the pharmacy to preclude loss of revenues should be given priority.

Reflecting on the reduction of the number of prescriptions being filled, a trend analysis should be performed. When the reduction in numbers shows a constant, action should be taken to reduce the staff. This examination should be performed over a period of at least twelve months.

Medical Records and Library

This support unit has a personnel allowance of 23, which reflects an increase of four over the previous year allocation of 19. Of the 23 positions allocated, six were vacant at the time of interview. This staff works on a two-shift basis and handles an average of 200 records per day.

This unit is located in two small spaces originally intended for use as a doctor's lounge and library. The space originally designed as the lounge is the main storage area for the records, while the original library space is being utilized by the medical transcriptionists. The spaces are very crowded and provide for limited working area.

Part of the overcrowding problem is due to the lack of a records retirement system. The head of this unit stated that a system was once proposed but was not adopted by the hospital's board. Microfilming of records, a method of permanent retention of a large volume of materials in a small space, has been used in the past but is not currently utilized. The records office provides for pre-selection of medical records to those areas that have appointments. The office is also required to provide delivery service to the out-patient department, located on the second floor of the hospital. Although the distance between the two areas is not significantly great, the physical structure of the hospital sometimes calls for a longer than average period of time for the round trip.

The requested personnel allowance of 23 includes the two assigned to the medical library. One of the medical transcriptionists is assigned to the Radiology department. The new positions requested include three additional transcriptionists and one medical records clerk. It is felt that one transcriptionist position should be permanently transferred to the radiology department, reducing the request for new positions in this performance area to two. The remaining two positions should remain vacant until adequate space is made available, and following a re-evaluation of the workload distribution after transfer of the one position as recommended.

Ancillary Services

The ancillary service staff personnel are listed in appendix (A). The staffing of these areas is considered to be adequate, except in those areas discussed in the following paragraphs.

Laboratory and Pathology

This service has a total personnel allowance of thirty-six, with four vacancies at the time of interview. The number of positions allocated reflects an increase of two over the previous year. One of the new positions is for a medical transcriptionist and the other for a medical laboratory technician III. The personnel services listing also indicates that seven of the positions are listed for part time employees. In essence, the total full time equivalent employee number is then reduced to thirty-two and one-half.

The laboratory has three shifts for its employees. Normal distribution is 19 on the 7 a.m. to 3 p.m. shift, 3 on the 3 p.m. to 11 p.m. shift, and 2 on the 11 p.m. to 7 a. m. shift. Five employees cover weekend activities.

Records revealed at the time of interview that 24,414 total examinations had been performed during the previous reporting period. Measurement procedures used for performance, as presented by the pathologist, indicated that a total of 20 employees would be needed to staff this service.

Several problems are apparent in this service. Primarily, the turnover of employees is high. This is caused by the hiring

of necessity, of laboratory personnel that are not fully compotent in all areas of performance. These employees, after receiving on-the-job training in other areas to upgrade their skills, leave to seek higher paying jobs, usually in the mainland. This high turnover and lack of full competence in all areas is generally responsible for the current over-staffing.

A second important problem, which is also evident in other areas, is the lack of a good preventative maintenance program for equipment. This non-existent program results from the fact that no qualified bio-medical equipment repair-man is available.

Another area to be considered is the lack of service from data processing. The laboratory sends copies of the examination forms to data processing, where the only use put to them is to record them for billing. Because of this, the laboratory staff is required to manually record and prepare monthly reports. This recording and tabulating procedure is a waste of man hours that could properly be devoted to other productive activities. It is very strongly recommended that a system be immediately instituted which is agreed to by the laboratory and the data processing center to receive, store, and provide printouts of examinations.

The staff of the laboratory can be reduced by a minimum of six if the following recommendations can be met.

First and most importantly, upgrade the skills of the laboratory staff to make them technically compotent in as many phases of performance as possible. Training at the mainland institutions should be on a contract basis which requires two months of service for each month of schooling. This advanced training should be limited to permanent residents of the island in order to reduce the turnover problem.

Secondly, institute a computer-based data input and retrieval system.

Third, implement a repair and continual preventative maintenance program.

Radiology

This service has a staffing allowance of 15, and had one vacancy at the time of interview. The staff is assigned on a three-shift basis, with twelve on the A. M. shift, two on the P. M. shift, and one at night, and operates on a seven-day basis.

This unit averages 1800 examinations per month. Each examination may require multiple exposure of films and time utilization will vary according to the specific examination requested by the physician.

The chief radiologic technician stated that one of the needs of his area is upgrading of the skills possessed by his staff. This would require training off-island.

He also stated that he has a major problem in the preventative maintenance area and that his salvation on his equipment is due to the fact that the General Electric

Corporation does have a technical representative on island who performs repair work. This situation is not wholly satisfactory, in that the representative leaves the island for varying periods of time. If a breakdown occurs during the absence of the technical representative, the equipment often has to be idle until the service technician returns or other service can be obtained.

A reduction of personnel in this area is to be considered provided that appropriate training for remaining personnel can become a reality. It is suggested that training of at least three or four technicians be undertaken and that a re-evaluation of this work performance area be conducted to measure the effectiveness of the staff, with the goal being a reduction in staff.

Mental Health Center

Administration

This unit has a personnel allowance of eleven with three positions vacant at the time of interview.

This unit has three positions identified as being connected with fiscal/accounting operation. Since the hospital accounting section of the hospital is charged with the preparation of fiscal information and the data processing division is supposed to be preparing data in the area, there appears to be a duplication of effort in the accounting area. If in fact, this section is receiving support from the hospital the

position for the accounting technician II and the Fiscal Specialist could be deleted with the accountant III and the research analyst being held responsible for the preparation and operation of the budget.

Medical/Clinical

This unit hasan allowance of eight with three positions vacant. The vacant positions includes two psychiatrists and a psychologist. Intensive efforts to fill these positions are being made as they are considered to be critical to the overall operation of the mental health center.

In-Patient

The in-patient staff has an allowance of nineteen and at the time of the interview all positions were occupied. A seventeen bed nursing unit is utilized for the in-patient care of patients and has had a 98% occupancy rate over the past two years. It is noted that the length of stay of these patients has decreased and this is held to be attributable to the out-patient follow up system which appears to be functioning with a high degree of success. The unit functions on a seven day, three shift basis and the number of personnel is adequate. The administrator of the service commented on the loyalty of staff and indicated that turnover of staff was extremely low.

Other Services

The other services of mental health facility serves approximately 300 out-patients. Travel to consultation

sets in various locations on the island does use some work teams. However, it is felt that visiting patients in or near their own village area contribute to the success of the program.

It is recommended that the staffing level not be changed at this time.

Conclusion

This unit is functioning with a high degree of success even though it is handicapped in several areas.

One area of handicap is the very nature of the structures that house the offices and out-patient units. This is old housing that has been converted to serve as office spaces, interview, treatment, and other service units. The other area is the ill kept old hospital facility. It is felt that a concerted effort to rehabilitate a portion of the old hospital facility for use as a mental health and substance abuse administrative and out-patient service area be undertaken as soon as possible. In connection with the above, the treatment area for in-patients should be renovated to create an area and atmosphere conducive to rehabilitation of the patients. One item that should be considered is to have input from the professional staff as to the decor, room arrangements, treatment equipment and other professional areas of concern prior to effecting a modernization program.

The staff of this unit participates in an on-the-job training program and utilizes off-island experts whenever possible.

A working relationship for training social work students of the University of Guam has been recently implemented. The mental health center is to be commended in this area which is designed to provide a beneficial period of instruction and make the students more effective practitioners.

Staffing Levels by Unit - 5 Year

The staffing levels by unit for both the hospital and the mental health center should remain basically similar to that now established. The suggested deletions and additions of staff positions are provided below. It must remain uppermost in the minds of all that changes may be required due to fluctuations in island conditions, addition and deletions of Federal programs, and other unknown factors that may predicate unusual activities at these facilities.

Mental Health Center

Delete

Accounting Technician II	1
Fiscal Specialist	1
Total	2

The director of the facility should be required to possess a Masters Degree in a health related area with some work in the area of mental health.

preferable that the degree be in a health related administrative area but a business degree with health experience is acceptable.

All supervisors/directors of the major sections of the hospital management system such as Personnel, Support Services Accounting, Patient Affairs and Data Processing should possess at the minimum a bachelor's degree.

Nursing

The chief nurse and the deputy chief nurse should possess a Masters degree, either in Nursing administration or in another health related administration area. A business degree with an emphasis in management is considered to be acceptable.

Ancillary Services

In the ancillary services the two major areas to consider are the laboratory and radiology service.

The director of the laboratory service should possess at least a bachelor's degree and be a registered medical laboratory technologist. The other medical laboratory technicians should possess the requisite level of education that permits them to be registered by the appropriate professional society, this would include the histo-technologist.

The radiology department should have as its director a registered technologist with a baccalaureate degree. The other employees in the area should all be registered technicians.

The other ancillary service areas should have as their manager, personnel that hold the requisite specialty certification and educational level prescribed for certification.

Support Services

The support services personnel should have the requisite level of training and experience to perform at the level of the position they occupy.

Action Plan

The Guam Health Planning and Development Agency should take the lead role in carrying out the several recommendations that are contained in the study and are listed below for convenience.

A. Legislative Action. Create or strengthen legislation that makes monies owed the hospital legally collectable. The use of a mandatory payroll checkage system or a promissory note would increase the flow of monies the hospital and would serve to resolve many of the problems now facing that entity.

B. Data Systems. Require the contractual manager system to provide the necessary qualified individual to write programs for the computer system for the accounting, procurement, pharmacy, and maintenance departments. Utilization of a computerized system in these areas would serve to be a method of saving revenues.

C. Training. Assist in the creation of a schedule for upgrading the skills of personnel in such areas as nursing,

laboratory, and radiology. The need for a continuing in-service education program in all hospital areas is evident. All basic skills need to be upgraded hospital wide. To insure attendance at training sessions they should be conducted on paid time and be used as a factor in awarding pay increments.

D. Diet Service. Implement a feasibility study to determine the amortization period for either an addition to the present new facility of a kitchen area or the rehabilitation of the food preparation area in the old facility. If the period of pay back is relatively short and operational costs including employees, raw materials, and utilities will not exceed cost of an outside contract, in-house feeding should be instituted.

E. Productive Management System. An organization such as Samaritan Health Service should be contracted to develop a productivity measurement system. A sample of their work has been provided to the Guam Health Planning Agency.

Conclusion

In an interview with Mr. Michael Henroid, GMH Executive Director, it was learned that the dysfunctional layout of the new physical plant causes inefficiencies in staffing. For example, the separation of the post partum ward from obstetrics and maternity requires full staffing both areas. If the two wards were contiguous, a smaller complement of nurses could

service both areas.

Lack of software and programming expertise has inhibited expansion of the electronic data processing section, according to Mr. Henroid. He is well aware, however, of the potential value of increased use of EDP systems, such as inventory control and accounting.

Administrative policies and procedures are presently undergoing revision. Each unit prepares an administrative manual for use. These are in the process of being revised. It is recommended that the hospital administrator and the Board of Directors review these prior to implementation. As noted in the action plan, it is, perhaps, better to have an outside agency prepare the policy and procedures manuals.

The design of the hospital does not permit optimum utilization of the staff. Services that should be contiguous to permit reduced staffing are located on separate levels. The lack of a complete kitchen for serving patients and staff creates an enormous outflow of monies.

The lack of interior stairways creates an exposure problem for patients and staff when they are required to use stairs when power outages stop the elevators.

The emergency receiving room should be located on the ground level of the hospital to permit the free access of emergency vehicles, especially if several in number respond to a serious accident.

The use of micro-filming of records should be re-instituted as soon as possible, coupled with the development and activation of records retirement system to create the necessary space for a more efficient operation of the medical records office.

Many of the staff of the hospital recognize the fact that problems exist and that they must work under unfavorable conditions. As cited in previous paragraphs, if more of the supervisory staff had management training and improved their communication lines a more efficient system would emerge.

The staffing ratio of 3.4 full time employees per bed is in line with the ratios at many mainland hospitals.

Increased public awareness of the fact that there is more to the hospital than the new building is necessary. The public affairs office should let the island people know that there are three separate facilities being operated and providing health care. This improvement of the image of the hospital would tend to dispel many of the rumors and general dissatisfaction with the staff of the hospital.

ADDENDUM

to

A SPECIAL STUDY

PREPARED FOR

GUAM HEALTH PLANNING

AND

DEVELOPMENT AGENCY

BY

PROFESSOR RICHARD N. PRELOSKY, MBA

AND

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Staffing Ratio

Reference in the abstract to a favorable comparison to several mainland institutions did not identify those institutions. To permit the reader to establish a comparison, the following data is provided.

A. Saint Joseph's Hospital, Phoenix, Arizona

This hospital is run by the Sisters of Mercy and has a 590 bed capacity. This hospital, at the time of interview, has 2200 employees for a FTE ratio of 3.73. The hospital facility includes the Barrow's Neurological Unit.

B. Good Samaritan Hospital System, Phoenix, Arizona

This system is comprised of four hospitals in the Phoenix area. The largest is Good Samaritan which has 700 beds, Desert Samaritan with 250 beds, Glendale Samaritan with 250 beds and Maryvale Samaritan with 62 beds. Two smaller hospitals are included in the system and one located in Northern Arizona.

The FTE ratio for the Good Samaritan System varies from 3.2 to 4.7 FTE. The highest ratio of employees to bed is at the main facility, Good Samaritan, which is a teaching hospital.

It is noted that the Good Samaritan System has developed standards for the performance of in excess of 4500 procedures.

Personnel - Additions/Deletions

Recommendations for additional personnel were made in several areas. They are:

a. Laundry and Linen Services. A recommendation to increase the personnel ceiling for this unit is based on the following. The authors believe that the number of personnel assigned cannot provide the staffing required to provide for shift coverage or a seven-day a week basis. Since clean, sanitary linens are as necessary to patient recovery as the medications prescribed, action to insure timely delivery of fresh, laundered bed clothes to in-patient areas is considered to be of great importance. The addition of two additional employees to this service could provide for a total of nine responsible for ward delivery service. This, of course, covers both facilities. A rotating shift assignment such as described below would provide for normal operations.

Monday thru Friday	AM Shift	4
Saturday and Sunday	AM Shift	1
Monday thru Friday	PM Shift	2
Saturday and Sunday	PM Shift	1
Nite Shift		1

Allowance for sick leave, annual leave, and other absences would account for other time not identified.

b. Data Processing Service. No specific numbers were identified in this area for increases. As noted in the body of the study, if the service is fully utilized and workload demands warrant, increases in staffing could be considered.

c. Maintenance. An increase in the numbers of qualified bio-medical repairman has been recommended. No new positions would be required because, as suggested, a trade-off of positions could be accomplished. The positions suggested for a trade-off are two trades helper positions. This recommendation is made because of the strong indications that no preventative maintenance program or quality repair service is available on a current basis. Quality preventative maintenance, coupled with an aggressive repair system, would add life to the huge amount of sensitive bio-medical equipment and, thus, over a period of time, reduce replacement costs.

Recommendations for deletions of personnel positions were based on the following:

a. Patient Affairs - Billing. A position identified as Accounting Technician II has not been properly utilized by this office. When the position is occupied, the incumbent is usually assigned to perform in the accounting office. Sound judgment predicts that if a position remains vacant, or the incumbent is assigned elsewhere, then the Accounting Technician is not needed in the office charged with the position.

b. Patient Affairs - Admitting. As noted in the body of the study, excess personnel are required to transport personnel to various services and clinics during the admission process. Recommendations were made to improve the communications between the nursing service and housekeeping department. It was also recommended that responsibility for transporting

patients from the clinics to the wards become part of the nursing service responsibility. Admission time for routine admissions would also be saved if patients were put into a system that called for them to have necessary examinations completed prior to the actual date of admission. Because of the short period of time to complete the actual paperwork processing for admission and discharge it does not seem necessary to have a staff of eighteen operate in this area. After recommended changes are made, the staff can be reduced by attrition.

c. Laboratory. Records presented by the pathologist and laboratory supervisor demonstrated that a total of twenty personnel would be sufficient to staff the service. Again, it is reiterated that only qualified personnel should be employed and if it is necessary, take some of the permanent employees and provide the necessary training to upgrade their skills. Incumbent on the hospital authority is the obligation to provide the necessary reward to those who acquire additional skills through education.

Upgraded personnel should then be able to perform the necessary tasks called for in the position descriptions (see appendix) reducing the number of semi-qualified staff. Implementation of a data retrieval system would also provide additional time for performance of actual laboratory procedures.

Staffing ratios for the Intermediate Care Facility and the Skilled Nursing Facility are perhaps a bit misunderstood.

The Skilled Nursing Facility has an allowance of 14 and the Intermediate Care Facility an allowance of 28. The established bed capacity for the SNF is 16 and for the ICF 43. The staff to bed ratio for the SNF is 1.143 and for the ICF 1.54. Staffing patterns for these areas are based on a nursing hour basis. For example, a ratio of 3.5 nursing hours per patient for a given work area. These hourly ratios vary according to the type of patient being cared for. The ratio of professional nurses on the skilled nursing facility has been determined to be one R.N. per work shift and for the Intermediate Nursing Facility to one R.N. per twenty-four hour work shift.

These ratios were established by the Commission for Administrative Services in hospitals and as mentioned are based on patient acuity.

The degrees of skills held by the registered nurses serving these facilities and the other nursing area may be compared by a review of the position descriptions attached to this report.

Evaluation of the Impact of GMH Policies and Procedures on the Effectiveness and Efficiency of Management

A thorough review of the following GMH policy manuals was conducted by the study team:

Administrative Nursing Policy Manual I, 1979

Patient Care Policy Manual II, 1979

Pharmacy Department Policies and Procedures Manual, 1979

Personnel Rules and Regulations, November, 1975

Personnel Rules and Regulations for S49007 (a) Employees, October, 1977

Nursing and Patient Care Policy Manuals

All of the above manuals are very comprehensive, and represent a considerable amount of time and effort on the part of those who compiled them.

However, in both the Administrative Nursing Policy Manual I and the Patient Care Policy Manual II, there are pages titled "Orientation to the Nursing Policy Manual." Each of these pages includes a statement to the effect that all nursing staff members should be acquainted with the manual, should know how to use it, and must sign their names in the space provided.

Manual I shows only one signature -- Teofila P. Cruz, signed October 1, 1979. There are no signatures in Manual II. The implication of this lack of signatures is that only one GMH nurse has read Manual I, and that none of the nurses have

read Manual II.

It is difficult, if not impossible, to evaluate the impact of policies and procedures on management effectiveness and efficiency if there is little or no evidence that those persons charged with carrying out policies and procedures are familiar with said policies and procedures.

If GMH personnel are, in fact, familiar with the material contained in the above manuals, and are observing the policies and procedures contained therein, the impact on management efficiency and effectiveness should be highly favorable, because the manuals cover all aspects of GMH organization and operation necessary for nursing, and other personnel.

For example, Manual I includes the following ten sections:

I. Governing Body Policies

II. Patients Bill of Rights

III. Organization Chart

IV. Building Plans - General Hospital Layout

V. Medical Staff

VI. Utilization Review

VII. Department of Nursing Policies (includes 21 sub-sections)

VIII. Support Services Policies (Relating to Nursing Services, includes 13 sub-sections)

IX. Miscellaneous

X. Disaster/Fire Plan

Manual II, Section I, covers the following nursing units: Constant Care, Hemodialysis, Intermediate Care, Labor and Delivery, Obstetrics and Gynecology, Newborn Nursery, Operating Room/Recovery Room, Emergency Room/ Outpatient Department, Pediatrics Ward, Skilled Nursing Facility, Medical-Surgical, and Medical. Each of the above sub-sections includes philosophy, goals and objectives, organizational chart, functional chart, recall plan, and unit policies.

Section II of Manual II, titled "General Policies," covers approximately 50 subjects, ranging from "accidents" to "vital signs." The latter topic, however, is missing (page 124). Also missing are pages 67 (licensing - R.N. and L.P.N.) and 77 (overseas telephone calls). These two items are included in Manual I.

Several technical errors appear in Manual II - misspellings, missing pages, and unnumbered pages. For example, on page 1 - 79, "Policies or Procedures for Child Abuse/ Neglect," item III-3 reads, "Unusual type and location of bums..." This evidently should be "burns". Also on page I - 79, item III-4 reads "funny history described from parents..." Presumably, this should be "family" history.

In Section II of Manual II, pages 87 and 88 are reversed, and pages 100-109, inclusive, are missing. These are all minor items which could be corrected by proper proofreading.

One of the powers and responsibilities of the Board of Trustees appears to place them above the laws of the Government of Guam. In the Administrative Nursing Policy Manual I, there is a copy of the Bylaws of the Board of Trustees of the Guam Memorial Hospital Authority, dated September 1978. Article I, Section 1, Item 10 reads, "Adopt and maintain a travel authorization policy notwithstanding any law to the contrary." (underlining added by researchers)

Such a policy would be permissible in a private enterprise; it appears questionable in a public, non-profit agency. GMH cannot be considered to be truly autonomous as long as it must depend, in part, upon appropriations from the General Fund.

Also in the Board of Trustees Bylaws, page 14, section 3-B states, "There shall be an evaluation of each member's physical and mental health." This pertains to the annual reappointment of medical staff members at GMH. There is nothing specific, however, regarding the type of evaluation required, or who is to administer it. Since all employees of GMH are required to have an annual physical examination by a physician, it would seem logical that the same requirement should apply to members of the medical staff.

Pharmacy Department Policies and Procedures Manual

This manual is also very comprehensive, except in the area of inventory control. Nothing is mentioned concerning minimum stock levels of drugs and pharmaceutical supplies, re-order points, or economic order quantities. A computerized inventory control system would probably save GMH a considerable amount of money in the long run.

On page 1-B-3, Item 1-f states, "If the committee accepts the trial request, then a six-month study of the drug will be stocked in the pharmacy." "Supply" would seem to be a better term here than "study."

Page 3-B-3 is devoted to policies and procedures for "Drugs loaned to or obtained from other hospital, community or clinic pharmacies." A computerized system of inventory control would probably eliminate much of the need for borrowing drugs from other institutions.

The procedure for the Medication Charting System, beginning on Page 4-B-2, appears unduly complicated and somewhat confusing. It covers four single-spaced typewritten pages. This procedure is undoubtedly very important, but does not seem to be very efficient, especially in view of the other duties expected of nurses.

Apparently a word has been omitted on page 5-C-1, Item C, which reads, "Prior to the culturing procedure the pharmacy technician should thoroughly clean the hood with 70% and clear off all admixture equipment or bottles within the hood." Should this be 70% alcohol?

Personnel Rules and Regulations

The Personnel Manual dated October 14, 1977, which supersedes previous rules and regulations, does not cover all the areas contained in the Personnel Manual dated November, 1975. Perhaps the two should be merged, so that all personnel rules and regulations are contained in one manual.

In the 1977 manual, Rule II, Item 2.11 states, "No spouse of any director, chief administrator, or other department head of the hospital may be employed in the same department which is so headed by such director, chief administrator, or other officer." This appears to be an excellent rule, which should perhaps be extended to include other close relatives -- brothers, sisters, parents, etc.

One policy which seems to be counter-productive in contained in Rule V, Item 5.01, which states, in part, "Persons having attained regular status and promoted or transferred shall serve a new probationary period of six months." Why would employees seek transfers or promotions if they knew they would be required to serve a new six-month probationary period, during which time they would

have no job security? They should at least be given an option to return to their former jobs, if they do not work out in their new positions. This policy appears to be a negative motivator, and could be misused by an unscrupulous supervisor or administrator to the detriment of employees.

Rule IX, Item 9.19, states, in part, "In computing such lump sum payment, leave on leave shall not be allowed." Perhaps this should be "time on leave."

Item 9.22 reads, in part, "The administrator may require certification for other period of illness as he/she deems available." Apparently, the word "advisable" should be used instead of "available."

Conclusions and Recommendations

Except for the preceding exceptions, GMH policies and procedures appear to be thorough and comprehensive, and should contribute to the effective and efficient management of the institution, if they are followed.

It is strongly recommended that all GMH personnel be required to familiarize themselves with all general policies and procedures, including personnel rules and regulations, and with the specific policies and procedures relevant to their repsective units. Nursing staff members should study Administrative Nursing Policy Manual I and Patient Care Policy Manual II, and should affix their signatures on the sheets provided for that purpose.

Action Plan

A schedule for implementation of the recommendations put forth in the main body of the study can only be one of a suggested nature. Efforts to place specific dates to the several items cannot be expected to have value because of the constant changes in administration, income levels, quality of personnel recruited and the change in patient categories. However, the time elements considered necessary to accomplish the recommendations can be expressed in monthly, quarterly, and annual increments. The actual time of completion of any of these areas is totally dependent on the date started, funding available, and methodology used to select personnel to accomplish the several tasks.

The Health Planning Agency should take a lead role in advocating the completion of the tasks outlined. They can offer support and assistance in their areas of competency.

a. Legislative Actions

Accounts Receivable

1) Data Collection. Request data from other state, county, or other government operated hospitals or collection enforcement methods. Time element - four (04) months.

2) Review and Compare. Review and compare data collected to determine which source or combination of sources utilized to enforce collection is best suited to Guam. A comparison with local existing legislation should be made at this time. Time element - four (04) months.

3) Prepare Draft Legislation. Legislation to provide for collection of monies owed for both in-patient and out-patient services should be drafted. The proposed legislation then should be provided to interested parties for review and comment. The Governor's Office should take the lead role in this area. Time element - three (03) months.

4) Introduction of Legislation. After review of the initial draft and revisions as necessary, action to introduce the proposed bill in the legislature should be accomplished. Time element - two (02) months.

5) Public Hearings. The public hearings required by law would be held after introduction of the proposed legislation. Time element - two (02) months.

6) Legislative Action. After the required public hearings the legislature through its organizational methodology would hear the bill and take proper action to pass the bill. Time element - one (01) month.

7) Gubernatorial Actions. Final action on the legislation would take place in the Office of the Governor. Time element - one (01) month.

8) Implementation. Actions required by all concerned would take place on the effective date of the law. Time element - immediately.

Total time: Seventeen (17) months.

B. Data Systems

The body of the report stated that the contracted manager should immediately provide the expertise to develop computerized system in several areas. Since it is evident that the contractor is to be replaced, the following is suggested.

1) Recruitment. Recruit a qualified full time employee that has the professional skill to develop and write programs that will insure full utilization of the data processing system currently available to the hospital authority. Special consideration should be given to the establishment of adequate compensation for this individual. Time element - three (03) months.

2) Review. After recruitment and placement, the programmer should be afforded the opportunity to review current programs. Time element - one (01) month.

3) Program Creation. The programmer at this time would start to write the necessary programs to effectively provide good data for the hospital system. Priorities for programs would need to be decided by the hospital management. However, the following priority system is suggested.

(a) Accounts Receivable

(1) Gather data

(2) Establish format

(3) Write program

(4) Debug Program

(5) Implement Program

Time element - three (03) to four (04) months.

b. Procurement and Pharmacy

(1) Physical Inventory
(2) Establish Format
(3) Write Program
(4) Debug Program
(5) Implement Program

Time element - four (04) to six (06) months.

The areas cited above are deemed to be the ones of major importance. A continual review of all departments should be made to determine needs for data processed records.

c. Training

Training of the hospital staff is a vast undertaking. It is recognized that the nursing service has an in-service training program that is worthy of commendation but it is also recognized that other areas have little or no training at all.

Upgrading of skills and/or professional capabilities is a matter that must be given serious consideration. Skills needed to be evaluated by department supervisors and personnel must be constantly trained in new techniques and to use new and improved equipment.

Different methodologies can be used to upgrade skills. In the case of new equipment, the manufacturer's representative can give necessary on-the-job training and this should be considered as a part of the procurement contact for each major piece of equipment considered for use in the hospital.

Administrative training may be accomplished by using the resources of the University of Guam, the Guam Community College, and the Training and Development Office. Fees for this type of training would be minimal and the return on investment high.

Development of skills in the professional areas can be obtained by utilizing several methods. One is to bring to the island those people who have the skill and are able to teach it to others. Liaison with professional schools of nursing, medicine, medical technology, radiology, and other areas would prove to be the most cost effective method of choice. Bringing one person to the island to hold a 5 to 10 day teaching seminar would cost approximately $800.00 for air fare from the West Coast, a lecture fee of approximately $1,500.00, per diem and transportation $500.00, miscellaneous items $200.00, for a total of $3,000.00. This cost pro-rated among twenty attendees is $150.00 per person.

Another method for advancing skills and education is to have selected personnel sent to institutions of higher education to gain additional skills and knowledge. Choice of school would dictate the cost but a person sent to Hawaii and to the University there has the following costs to be paid. Tuition $300.00 for full time student, fees are approximately $40.00, books about $50.00, living cost would depend on assignment to a dormitory. If this is accomplished, room and board for one semester is approximately $800.00. This total cost, excluding salary but

including round trip air fare would be $1,450.00.

Another form of skill and knowledge improvement is for professionals to attend meetings and seminars. Costs vary but it is relatively safe to approximate a cost of $1,400.00 which includes air fare, per diem, and fees for a meeting of five days duration on the West Coast. Personnel selected for this type of training should be required to present local seminar to cognizant personnel immediately after returning from a meeting/seminar in order that others may benefit.

On-the-job training in particular work areas is the responsibility of the supervisor. Some general types of training may be scheduled by the personnel division for all employees in areas such as safety, fire drills, typhoon drills, and other disaster drills. Specific training in areas of performance should utilize the skills of the supervisor in cases such as the laboratory, radiology, pharmacy, and central supply.

It is recommended that a budget for training be established and the hospital utilize those career-minded staff members who will express a willingness to learn and return to teach others.

d. Diet Service

A recommendation for a feasibility study to determine the cost effectiveness of establishing or renovating food service facilities for service of the patients was made. There appears to be dissatisfaction with the current service and it is believed that a hospital managed service would eliminate most complaints.

a. Action (Old Facility)

(1) Seek data on renovation of old facility.
(2) Acquire cost data on equipment to include wheels for food transport.
(3) Reassess personnel needs.
(4) Compare with cost for addition to new facility.
(5) Compute operating cost, i.e. utilities.

b. Action (New Facility)

(1) Determine location of food service facility.
(2) Request cost data for building construction.
(3) Prepare cost data on equipment.
(4) Reassess personnel needs.
(5) Compute operating costs.

After costs are computed for (a) and (b) above, a comparison with the current food service operation should be made. If a favorable operating cost can be proven, a new or improved facility can be chosen. If the operation proves to have a loss factor, continue with the present system.

e. Production Management System

An organization that specializes in hospital operations should be contracted to review all operations of the hospital. After this review, a standard of performance can be produced, that if adhered to, would prove to be cost effective in that true charges for patient care can be generated and over a period of time more effective utilization of manpower and facilities can be accomplished and the potential for a reduction in hospital costs can be realized.

The future for the hospital system can be one of increased growth. The hospital system must be taken out of the political

arena and be left to the professionals to operate. Health care costs are predicted to continue to rise. Through quality care and efficient management patients can be better served and costs maintained on a slower than average growth rate.

Training is important. Attention must be given to the needs of the staff and, of course, the patients. People from all levels need to realize the importance of health care and must be encouraged to use resources wisely.

The predicted change in the management of the hospital will have a tremendous effect on current and future policies. Only through cooperation with agencies such as the Health Planning Agency and Public Health and Social Services will any degree of success be attained.

APPENDIX A

Guam Memorial Hospital

Medical Staff

Medical Staff	11
Physician Specialist	3
General Practitioner	5
Pathologist	1
Pediatrician	1
Emergency Room Physician	1
	11

Nursing Service

Nursing Service Administration	19	
Nurse Supervisor IV		1
Nurse Supervisor III		1
Nurse Supervisor II		8
Staff Nurse III		2
Nurse Aide I		1
L.P.N. I		1
Administrative Assistant		1
Clerk-Typist IV		1
Ward Clerk II		0
		16
Nursing Service - Medical Unit	21	
Nurse Supervisor I		1
Staff Nurse III		3
Staff Nurse II		0
Staff Nurse I		3
Nurse Aide II		5
Nurse Aide I		5
L.P.N. II		1
L.P.N. I		1
Ward Clerk II		1
		20

Nursing Service - Surgical Unit	40	
Nurse Supervisor	2	
Staff Nurse II	9	
Staff Nurse II	2	
Staff Nurse I	2	
L.P.N. II	4	
L.P.N. I	4	
Nurse Aide II	8	
Nurse Aide I	7	
Ward Clerk II	2	
		40
Nursing Service - Skilled Nursing Faculty	14	
Nurse Supervisor I	1	
Staff Nurse III	4	
Staff Nurse I	1	
Nurse Aide II	2	
Nurse Aide I	5	
		13

Nursing Service - Intermediate Care Facility		28
Nurse Supervisor I	1	
Staff Nurse II	1	
L.P.N. II	1	
L.P.N. I	3	
Nurse Aide II	5	
Nurse Aide I	11	
Ward Clerk II	1	
		23
Nursing Service - Emergency/Out-Patient		20
Nurse Supervisor I	1	
Staff Nurse III	5	
Staff Nurse II	0	
Staff Nurse I	1	
Nurse Aide II	2	
Nurse Aide I	2	
L.P.N. II	3	
Emergency Room Technician	1	
Ward Clerk II	3	
Ward Clerk I	1	
		19

Nursing Services - Labor and Delivery		15
Nurse Supervisor I	1	
Staff Nurse III	5	
Staff Nurse II	1	
Staff Nurse I	0	
L.P.N. II	2	
Nurse Aide I	3	
Nurse Aide II	2	
		14
Nursing Service - Operating/Recovery Room		17
Nursing Supervisor I	1	
Staff Nurse III	6	
Staff Nurse II	2	
L.P.N. II	1	
Nurse Aide II	2	
Nurse Aide I	1	
Operating Room Technician II	3	
Clerk-Typist IV	1	
		17

Nursing Service - Newborn Nursery	21		
Nurse Supervisor I		1	
Staff Nurse III		8	
Staff Nurse II		1	
Staff Nurse I		1	
L.P.N. II		2	
Nurse Aide II		5	
Nurse Aide I		2	
Ward Clerk II		1	
			21
Nursing Service - OB/GYN	19		
Nurse Supervisor I		1	
Staff Nurse III		4	
Staff Nurse II		1	
L.P.N. II		2	
L.P.N. I		3	
Nurse Aide II		3	
Nurse Aide I		3	
Ward Clerk II		1	
			18

Nursing Service - Pediatrics	18		
Nurse Supervisor I		1	
Staff Nurse III		4	
Staff Nurse I		1	
L.P.N. II		2	
L.P.N. I		2	
Nurse Aide II		4	
Nurse Aide I		2	
Ward Clerk II		1	
			17
Nursing Service - CCU/ICU	17		
Nurse Supervisor I		1	
Staff Nurse III		11	
Staff Nurse II		2	
Nurse Aide II		1	
Nurse Aide I		0	
			15

Nursing Service - Recap

Nurse Supervisor IV	1	
Nurse Supervisor III	1	
Nurse Supervisor II	8	
Nurse Supervisor I	13	
Staff Nurse III	61	
Staff Nurse II	8	
Staff Nurse I	9	
Licensed Practical Nurse II	17	
Licensed Practical Nurse I	12	
Nurse Aide II	43	
Nurse Aide I	43	
Total	216	= 34.1%

18 Clerical

Support Services

Laundry and Linen	8	
Laundry Supervisor		1
Laundry Leader		2
Laundry Worker		4
Seamster		1
		8
Maintenance	42	
Director, Support Services		1
Maintenance Supervisor		3
Supervisor Medical Electronic		1
Medical Electronic Technician II		1
Refrigerator Mechanic Leader		1
Reefer Mechanic II		2
Plumber Supervisor		1
Plumber II		1
Plumber I		2
Boiler Operator II		5
Boiler Repairman		1
Capenter Leader		1

Carpenter II	4
Electrician Leader	1
Electrician II	1
Electrician I	1
Maintenance Worker	1
Trades Helper	4
General Helper	2
Painter II	1
Welder II	1
Park Attendant Supervisor	1
Park Attendant	3
Clerk-Typist IV	1
	41

Dietary 31

Chief Dietician	1
Therapeutic Dietician	1
Food Service Supervisor	1
Cook II	3
Cook I	3
Special Diet Assistant	3
Food Service Worker	2
Kitchen Helper	13
Clerk III	1
Clerk II	1
Clerk I	1
	30

House Keeping	36		
	Maintenance Supervisor	1	
	Housekeeping Supervisor	3	
	Housekeper II	5	
	Hosekeeper I	26	
	Clerk-Typist III	1	
			36
Medical Records and Library	23		
	Director, Medical Records	1	
	Medical Reocrd Technician	1	
	Medical Transcriptionist	5	
	Medical Records Clerk	1	
	Clerk IV	1	
	Clerk III	3	
	Clerk II	1	
	Clerk I	4	
			17

Administration and Fiscal

Hospital Administration - PR and Special Project	8	
Hospital Administrator	(1)	Non-Gov't Employee
Assistant Administrator	1	
Private Secretary	1	
Administrative Secretary	1	
Clerk IV	1	
Public Information Officer	1	
Utilization Review Coordinator	1	
Safety Director	1	
Board Secretary	0	
	7	

Personnel	7
Administrator, Personnel Services	1
Personnel Specialist III	1
Personnel Specialist II	2
Personnel Specialist I	2
Clerk IV	0
	6

Accounting and Payroll 14		
Director, Fiscal Services	1	
Controller	1	
Budget Analyst IV	1	
Accounting Technician II	2	
Accounting Technician I	1	
Account Clerk III	1	
Accountant III	1	
Administrator Assistant	1	
Payroll Supervisor	1	
Assistant Payroll Supervisor	1	
Payroll Clerk IV	2	
		13
Purchasing 10		
Purchasing Agent	1	
Warehouse Supervisor	1	
Administrative Assistant	1	
Storekeeper III	1	
Storekeeper II	1	
Storekeeper I	1	
Clerk-Typist IV	1	
Clerk IV	1	
Clerk III	1	
Clerk II	1	
		10

Patient Affairs - Business Office	21	
Patient Affairs Manager	1	
Administrative Assistant	1	
Hospital Credit Manager	1	
Clerk V	1	
Clerk IV	1	
Clerk III	8	
Clerk II	3	
Cashier II	1	
Cashier I	1	
Accounting Technician II	1	
		20
Patient Affairs - Admitting	18	
Admitting Officer	1	
Assistant Admission Officer	1	
Clerk IV	1	
Clerk III	4	
Clerk II	5	
Clerk I	6	
		18

Patient Affairs - Communication Center	6	
Telephone Operator Supervisor	1	
Telephone Operator	4	
		5
Patient Affairs - Social Services	6	
Social Services Supervisor	1	
Social Worker II	1	
Social Worker I	2	
Social Worker Consultant	0	
Clerk-Typist IV	1	
		5
Data Processing	12	
Data Processing Manager	1	
Computer Systems Analyst	1	
Machine Operator II	1	
Machine Operator I	1	
Card Punch Supervisor	1	
Card Punch Operator III	1	
Card Punch Operator II	1	
Card Punch Operator I	2	
Data Control Clerk Supervisor	1	
Data Control Clerk I	1	
Clerk III	1	
		12

Ancillary Services

Recreational Therapy	4	
Chief Therapist	1	
Nurse Aide II	2	
Nurse Aide I	1	
		4
Central Service Supply	7	
Nurse Supervisor I	1	
Emergency Room Technician	1	
Nurse Aide II	3	
Nurse Aide I	2	
		7
Occupational Therapy	1	
Occupational Therapy Aide III	1	
		1
Physical Therapy	6	
Chief Physical Therapist	1	
Physical Therapist	0	
Physical Therapy Technician III	3	
Clerk-typist III	1	
		5

EKG/EEG 4

Supervisor	1
EEG Technician	1
EKG Technician	1
General Helper	0
	3

Laboratory and Pathology 36

Chief of Laboratory	1
Laboratory Technologist II	5
Laboratory Technologist I	2
Medical Laboratory Technologist IV	3
Medical Lab Technician III	10
Medical Lab Technician II	2
Histo-Technologist	1
Medical Lab Technician I	2
Medical Lab Aide	1
Morgue Attendant	1
Administration Secretary	1
Clerk-typist III	1
Clerk II	1
Medical Transcriber	1
	32

Radiology 15

Chief Radiologist Technician	1
Rsdiologist Technician	3
Nuclear Medical Technician	1
X-Ray Technician III	3
X-Ray Technician II	2
X-Ray Technician I	3
Clerk III	1
	14

Hemodialysis 10

Nurse Supervisor I	1
Staff Nurse III	4
L.P.N. II	1
Nurse Aide II	3
Staff Nurse I	0
	9

Inhalation Therapy 8	
Nurse Supervisor I	1
Inhalation Therapist	1
Inhalation Therapy Technician II	3
Inhalation Therapy Technician I	1
Nurse Aide I	1
Blood Gas Machine Instructor	0
	7
Pharmacy 17	
Director of Pharmacy	1
Pharmicist II	2
Pharmacist I	3
Pharmacist Aide II	1
Pharmacist Aide I	2
Clerk I	4
Buyer I	1
	15

Guam Memorial Hospital

Recap

Ancillary Services

Budgeted	Occupied
108	97

Support Services

Budgeted	Occupied
140	132

Administration and Fiscal

Budgeted	Occupied
102	96

Medical Staff

Budgeted	Occupied
11	11

Nursing Services

Budgeted	Occupied
249	233
= 610	= 569

APPENDIX B

Mental Health Center

Administration	**11**
Director	1
Assistant Director	0
Medical Records Technician	0
Accountant	1
Accounting Technician II	1
Fiscal Specialist	0
Administrative Assistant	1
Research Analyst III	1
Staff Nurse III	1
Administrative Secretary	1
Clerk II	1
	8
Medical/Clinical	**8**
Psychiatrist	1
General Practitioner	1
Clinical Psychologist (PHD)	1
Clinical Psychologist (MA)	1
Nursing Supervisor	1
	5

Inpatient 19		
Nurse Supervisor	1	
Staff Nurse III	5	
Social Worker III	1	
Social Worker II	1	
Psychiatric Technician II	6	
Psychiatric Technician I	5	
		19
Partial Care 10		
Nurse Supervisor	1	
Staff Nurse III	2	
Staff Nurse II	1	
Psychiatric Technician II	3	
Social Worker II	1	
Vocational Rehabilitation Counselor	1	
Clerk IV	1	
		10
Affercare 3		
Staff Nurse III	2	
Psychiatric Technician II	0	
		2

Progress House 2		
Progress House Manager	1	
Assistant Progress House Manager	0	
		1
Adult Out-Patient 6		
Social Service Supervisor III	1	
Social Worker IV	2	
Social Worker III	1	
Social Worker II	1	
Medical Transciptionist	1	
		6
Programman Patgon 6		
Director	1	
Social Service Supervisor III	1	
Social Service Supervisor II		
Social Worker IV	2	
Clerk Steno IV	1	
		6
Elderly 3		
Elderly Service Coordinator	1	
Social Worker IV	0	
Psychiatric Technician I	1	
		2

Substance abuse Treatment Service	10	
Supervisor	1	
Staff Nurse III	2	
Substance abuse Treatment Specialist	1	
Substance abuse Treatment Worker	1	
Social worker IV	1	
Social Worker II	1	
Social Worker I	1	
Psychiatric Technician II	1	
Clerk-typist IV	1	
		10
Consultation and Education Service	1	
C and E Coordinator	1	
		1
Positions authorized	79	
Positions occupied	70	
Total vacancies	9	

APPENDIX C

GUAM MEMORIAL HOSPITAL
MEDICAL RECORDS DEPARTMENT

DATE: _____

SERVICE	PT. DAYS MONTH TO DATE	TOTAL REMAINING MIDNIGHT	TOTAL BEDS	OCCUPANCY RATE
PEDIATRICS			25	
MEDICAL			25	
MED-SURGICAL			49	
OBSTETRICS			24	
GYN			15	
CCU-ICU			9	
TOTAL ACUTE			147	
SNF			16	
MENTAL HEALTH			17	
ICF			43	
TOTAL ACUTE & CHRONIC			223	
NEWBORN			22	
NICU			4	

APPENDIX D

	This Month	s mo. last Year	Fiscal Year to date	Fiscal Year to date
verage days care rendered (exclude Newborn)	183	171	176	158
Pediatric	10	13	12	13
Medical East	23	20	21	19
Medical-Surgical	43	37	38	36
NICU	-	1	1	
GYN	5	6	5	3
Obstetrics	15	14	16	14
Constant Care Unit & ICU	5	5	5	6
Skilled Nursing Facility	16	13	14	13
Tuberculosis				
Mental Health	24	20	21	16
Intermediate Care Facility	42	43	43	39
Newborn Infants	15	14	16	15
Average Percentage of Occupancy (Exclude Newborn)	81.84	76.77	78.98	78.13
Pediatric	41.87	53.20	49.74	59.61
Medical East	93.07	79.20	85.52	86.19
Medical-Surgical	87.07	75.51	71.51	99.80
NICU	-	21.67	11.92	
GYN	30.89	40.67	35.16	
Obstetrics	63.06	57.64	66.26	51.09
Constant Care Unit & ICU	52.96	50.74	50.99	70.58
Skilled Nursing Facility	96.88	78.75	90.39	81.11
Tuberculosis				
Mental Health	138.82	120.39	122.84	96.70
Intermediate Care Facility	98.76	99.22	99.17	99.79
Newborn Infants	68.79	62.12	71.62	53.44

MONTHLY COMPARATIVE REPORT

Month June 19 79

	This Month	Last Month	This mo. last Year	This Fiscal year to date	Last Fiscal year to date	% of Increase or Decrease
otal Patient Admitted (ex. Newborn)	596	643	622	7711	6663	+15.71
Pediatric	82	92	90	1087	960	+13.13
Medical East	48	57	64	707	615	+14.96
Medical-Surgical	166	140	191	2014	1996	+ .90
NICU	-	1	4	30	14	
GYN	68	71	73	850	401	
Obstetrics	176	231	158	2342	1977	+18.46
Constant Care Unit & ICU	40	33	30	495	426	+16.20
Skilled Nursing Facility	1	6	2	31	65	-109.68
Tuberculosis						
Mental Health	13	12	8	143	174	-21.68
Intermediate Care Facility	2	-	2	12	35	-191.67
Newborn Infants	157	196	142	2071	1694	+22.26
al Days Care rendered (ex. Newborn)	5475	5753	5136	64,284	57,707	+11.40
Pediatric	314	347	399	4539	4613	-1.63
Medical East	698	686	594	7804	6841	+14.08
Medical-Surgical	1280	1128	1110	13,897	13,175	+5.48
NICU	-	2	26	174	53	
GYN	139	172	183	1925	918	
Obstetrics	454	558	415	5805	4980	+16.59
Constant Care Unit & ICU	143	123	137	1675	2039	-21.73
Skilled Nursing Facility	465	463	378	5279	4737	+11.44
Tuberculosis						
Mental Health	708	941	614	7622	6000	+27.03
Intermediate Care Facility	1274	1333	1280	15,564	14,351	+8.45
Newborn Infants	454	541	410	5752	5349	+7.52

ncreased --Decreased

nth June 19 79

	This Month	Last Month	This Mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increase or Decrease
tal Discharges (Inc.Death) Ex.NB	617	624	620	7718	6619	
Pediatric	78	89	91	1093	940	
Medical East	74	78	77	989	782	
Medical-Surgical	184	147	204	2143	2147	
NICU	-	-	1	9	9	
GYN	72	74	71	863	392	
Obstetrics	178	219	158	2333	1950	
Constant Care Unit & ICU	8	3	5	108	125	
Skilled Nursing Facility	1	2	1	26	62	
Tuberculosis						
Mental Health	20	12	10	142	181	
Intermediate Care Facility	2	-	2	12	31	
Newborn Infants	162	183	139	2075	1679	
otal Deaths (Exclude Newborn)	12	12	11	204	165	
Pediatric	1	-	1	7	3	
Medical East	4	7	3	71	42	
Medical-Surgical	2	3	3	41	26	
NICU	-	-	1	8	7	
GYN	-	-	-	-	-	
Obstetrics	-	-	-	-	-	
Constant Care Unit & ICU	5	2	2	69	71	
Skilled Nursing Facility	-	-	-	4	10	
Tuberculosis						
Mental Health	-	-	-	1	-	
Intermediate Care Facility	-	-	1	3	6	
ewborn Infants	-	1	-	6	7	

Month June 19 79

	This Month	Last mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date
al Length of Stay	5058	3826	49,563	71,894
ediatric	374	412	4533	5467
Medical East	698	542	8214	6835
edical-Surgical	1150	1183	13,195	13,002
NICU	-	21	148	48
GYN	153	172	1934	901
bstetrics	458	406	5812	4983
Constant Care Unit & ICU	129	127	1487	1990
killed Nursing Facility	31	70	2705	4131
uberculosis				
Mental Health	1570	730	6911	6364
Intermediate Care Facility	495	163	4624	28,173
Newborn Infants	500	402	5740	5199
verage Length of Stay	8	6	6	11
Pediatric	5	5	4	6
edical East	9	7	8	9
Medical-Surgical	6	6	6	6
NICU	-	21	16	5
GYN	2	2	2	2
Obstetrics	3	3	2	3
Constant Care Unit & ICU	16	25	14	16
killed Nursing Facility	31	70	104	67
Tuberculosis				
Mental Health	75	73	48	35
Intermediate Care Facility	248	82	384	909
Newborn Infants	3	3	3	3

	This Month	his mo. Last Year	Fiscal Year to date	Fiscal Year to date
oss Death Rate (Exclude Newborn)	1.94	1.77	2.64	2.49
Pediatric	1.28	1.10	.64	.32
Medical East	5.41	3.90	7.18	5.37
Medical-Surgical	1.09	1.47	1.91	1.27
NICU	-	100.00	88.89	77.78
GYN	-	-	-	-
Obstetrics	-	-	-	-
Constant Care Unit & ICU	62.50	40.00	63.89	56.80
Skilled Nursing Facility	-	-	15.38	16.13
Tuberculosis				
Mental Health	-	-	.70	-
Intermediate Care Facility	-	50.00	25.00	19.35
Newborn Infants	-	-	.29	.42
tal Autopsies (Exclude Newborn)	8	6	106	88
Pediatric	1	-	4	1
Medical East	1	2	37	19
Medical-Surgical	2	3	19	14
NICU	-	-	2	3
GYN	-	-	-	-
Obstetrics	-	-	-	-
Constant Care Unit & ICU	4	1	38	41
Skilled Nursing Facility	-	-	3	6
Tuberculosis				
Mental Health	-	-	-	-
Intermediate Care Facility	-	-	3	4
Newborn Infants	-	-	3	2

th June 19 79

	This Month	Last Month	This mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increased or Decreased
ss Autopsy Rate (Ex.Newborn)	66.67	41.67	54.55	52.	53.33	
ediatric	100.00	-	-	57.14	33.33	
Medical East	25.00	42.86	66.67	52.11	45.24	
edical-Surgical	100.00	33.33	100.00	46.34	19.23	
NICU	-	-	-	25.00	42.86	
YN	-	-	-	-	-	
bstetrics	-	-	-	-	-	
Constant Care Unit & ICU	80.00	50.00	50.00	55.07	57.75	
killed Nursing Facility	-	-	-	75.00	60.00	
uberculosis						
Mental Health	-	-	-		-	
ntermediate Care Facility	-	-	-	100.00	66.67	
ewborn Infants	-	-	-	50.00	28.57	
PERATIONS:						
otal Operations	332	274	316	3584	2900	+27.03
Major	135	123	173	1509	1196	+26.17
inor	197	151	143	2075	1704	+21.77
TPATIENT VISITS:						
otal Visits	2465	2596	2601	32,854	30,847	+6.51
mergency Visits	539	467	517	6644	7456	-12.22
ENTAL HEALTH:						
Total Outpatients Visits	177	205	68	1555	1702	-9.45
otal Day Care Patient Days	511	515	450	5269	4614	+14.20
otal Days Care Rendered						
Medicare Pts.						
Over 65 yrs. old	342	234	296	3199	5145	
Under 65 yrs.Old	-	22	7	78	191	
Others over 65 yrs.old	369	225	169	3460	3598	

Month June 19 79

tal Days Care rendered (continued)	This Month	Last Month	This mo Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increased or Decreased
Constant Care Unit & ICU						
Medicare						
Over 65 yrs. old	37	16	21	452	75	
Under 65 yrs. old	-	3	-	48	8	
Other patients over 65 yrs. old	18	8	-	399	31	
Skilled Nursing Facility						
Medicare						
Over 65 yrs. old	31	-	70	630	682	
Under 65 yrs. old	-	-	-	134	-	
Other patients over 65 yrs. old	-	367	-	530	124	
Mental Health						
Medicare						
Over 65 yrs. old	-	-	-	-	-	
Under 65 yrs. old	-	-	-	-	-	
Other patients over 65 yrs. old	-	-	-	13	-	
Hemodialysis Unit						
Medicare						
Over 65 yrs. old	-	-	-	-	-	
Under 65 yrs. old	-	-	-	-	-	
Other patients over 65 yrs. old	-	-	-	-	-	
Intermediate Care Facility						
Medicare						
Over 65 yrs. old	-	-	-	565	1686	
Under 65 yrs. old	-	-	-	-	-	
Other patients over 65 yrs. old	58	-	163	452	354	
Newborn Infants						

ncreased - Decreased

MEDICAL RECORDS DEPARTMENT
MONTHLY COMPARATIVE REPORT

Month June 19 78

	This Month	Last Month	This mo. last Year	This Fiscal year to date	Last Fiscal year to date	% of Increase or Decrease
tal Patient Admitted (ex. Newborn)	622	684	463	6663	6761	-1.47
Pediatric	90	87	55	960	867	+10.72
Medical East	64	59	42	615	518	+18.72
Medical-Surgical	191	188		1996	444	
Surgical East			65		1098	
Surgical West			78		751	
GYN	73	77		401		
Obstetrics	158	204	169	1977	2513	-27.11
Constant Care Unit & ICU	30	46	17	426	375	+13.60
SNF Physical Medicine & Rehabilitation	2	3	9	65	40	+62.50
Tuberculosis						
Mental Health	8	13	22	174	140	+24.29
Custodial Care Facility	2	2	6	35	15	+133.33
Newborn Infants	142	183	121	1694	2051	-21.07
NICU	4	5		14		
al Days Care rendered (ex. Newborn)	5136	5384	4192	57,707	50,077	+15.24
Pediatric	399	423	286	4613	4030	+14.47
Medical East	594	665	485	6841	5863	+16.68
Medical-Surgical	1110	1216		13175	3539	
Surgical East			466		5988	
Surgical West			490		4312	
GYN	183	172		918		
Obstetrics	415	526	432	4980	6236	-25.20
Constant Care Unit & ICU	137	158	127	2039	1588	+28.40
SNF Physical Medicine & Rehabilitation	378	380	414	4737	5248	-10.79
Tuberculosis						
Mental Health	614	516	438	6000	6020	- .33
Custodial Care Facility	1280	1320	1054	14351	12,253	+17.12
Newborn Infants	410	542	361	5349	6580	-23.01
NICU	26	8		53		

ncreased - Decreased

Month June 19 78

	This Month	This mo. last Year	This Fiscal Year to date	Last Fiscal Year to date
Average days care rendered (exclude Newborn)	171	140	158	151
Pediatric	13	10	13	11
Medical East	20	16	19	16
Medical-Surgical	37		36	
Surgical East		16		16
Surgical West		16		
GYN	6		3	
Obstetrics	14	14	14	17
Constant Care Unit & ICU	5	4	6	4
SNF Physical Medicine & Rehabilitation	13	14	13	14
Tuberculosis				
Mental Health	20	15	16	16
Custodial Care Facility	43	35	39	34
Newborn Infants	14	12	15	18
NICU	1		-	
Average Percentage of Occupancy (Exclude Newborn)	76.77	76.78	78.13	81.38
Pediatric	53.20	52.96	59.61	60.48
Medical East	79.20	85.09	86.19	85.69
Medical-Surgical	75.51		99.80	
Surgical East		81.75		82.58
Surgical West		86.06		
GYN	40.67		36.65	
Obstetrics	57.64	49.66	51.09	58.91
Constant Care Unit & ICU	50.74	60.48	70.58	62.30
SNF Physical Medicine & Rehabilitation	78.75	86.25	81.11	89.86
Tuberculosis				
Mental Health	120.39	85.88	96.70	97.02
Custodial Care Facility	99.22	106.46	99.79	101.73
Newborn Infants	62.12	37.60	53.44	56.34
NICU	21.67		7.93	

Month June 19 78

	This Month	Last Month	This Mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increase or Decrease
Total Discharges (Inc.Death) Ex.NB	620	682	475	6619	6799	-2.72
Pediatric	91	82	54	940	857	+9.68
Medical East	77	82	54	782	692	+13.01
Medical-Surgical	204	208		2147	453	
Surgical East			74		1174	
Surgical West			73		742	
GYN	71	77		392		
Obstetrics	158	203	174	1950	2518	-29.13
Constant Care Unit & ICU	5	12	9	125	115	+8.70
SNF [illegible]	1	2	9	62	94	-51.61
Tuberculosis						
Mental Health	10	10	26	181	144	+25.69
Custodial Care Facility	2	2	2	31	10	+210.00
Newborn Infants	139	182	129	1679	2062	-22.81
NICU	1	4		9		
Total Deaths (Exclude Newborn)	11	17	10	165	142	
Pediatric	1	-	1	3	4	
Medical East	3	4	4	42	40	
Medical-Surgical	3	1		26	21	
Surgical East			1		5	
Surgical West			1		5	
GYN	-	-		-		
Obstetrics	-	-	-	-	-	
Constant Care Unit & ICU	2	8	2	71	52	
SNF [illegible]	-			10	10	
Tuberculosis						
Mental Health	-	-	1	-	1	
Custodial Care Facility	1	-	-	6	4	
Newborn Infants	-	2	2	7	25	
NICU	1	4		7		

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	This Month	This mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date
al Length of Stay	3826	5775	71,894	50,260
Pediatric	412	233	5467	3675
Medical East	542	1018	6835	6514
Medical-Surgical	1183		13,002	3496
Surgical East		434		5814
Surgical West		570		4307
GYN	172		901	
Obstetrics	406	442	4983	6266
Constant Care Unit & ICU	127	84	1990	1280
Physical Medicine & Rehabilitation SNF	70	612	4131	4790
Tuberculosis				
Mental Health	730	1674	6264 ~~6373~~	5601
Custodial Care Facility	163	708	28,173	8517
Newborn Infants	402	382	5199	6614
NICU	21		48	
erage Length of Stay	6	12	11	7
Pediatric	5	4	6	4
Medical East	7	19	9	9
Medical-Surgical	6		6	
Surgical East		6		5
Surgical West		8		
GYN	2		2	
Obstetrics	3	3	3	2
Constant Care Unit & ICU	25	9	16	11
Physical Medicine & Rehabilitation SNF	70	68	67	51
Tuberculosis				
Mental Health	73	64	35	39
Custodial Care Facility	82	354	909	852
Newborn Infants	3	3	3	3
NICU	21		5	

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	This Month	This mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date
Gross Death Rate (Exclude Newborn)	1.77	2.11	2.49	2.09
Pediatric	1.10	1.85	.32	.47
Medical East	3.90	7.41	5.37	5.78
Medical-Surgical	1.47		1.27	
Surgical East		1.35		.43
Surgical West		1.37		.67
GYN	-		-	
Obstetrics	-	-	-	-
Constant Care Unit & ICU	40.00	22.22	56.80	45.22
[illegible] SNF	-	-	16.13	10.64
Tuberculosis				
Mental Health	-	3.85	-	.67
Custodial Care Facility	50.00	-	19.35	40.00
Newborn Infants	-	1.55	.42	1.21
NICU	100.00		77.78	
tal Autopsies (Exclude Newborn)	6	6	88	93
Pediatric	-	1	1	4
Medical East	2	2	19	25
Medical-Surgical	3		5	14
Surgical East		1	1	4
Surgical West		-	8	2
GYN	-		-	
Obstetrics	-	-	-	-
Constant Care Unit & ICU	1	1	41	36
[illegible] SNF	-	-	6	5
Tuberculosis				
Mental Health	-	1	-	1
Custodial Care Facility	-	-	4	2
Newborn Infants	-	-	2	9
NICU	—		3	

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	This Month	Last Month	This mo. Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increased or Decreased
oss Autopsy Rate (Ex.Newborn)	54.55	52.94	60.00	53.33	65.49	
ediatric	-	-	100.00	33.33	100.00	
Medical East	66.67	75.00	50.00	45.24	62.50	
Medical-Surgical	100.00	100.00		19.23		
rgical East			100.00		80.00	
Surgical West			-		-	
YN	-	-		-		
stetrics	-	-	-	-	-	
onstant Care Unit & ICU	50.00	50.00	50.00	57.75	69.23	
NF						
Physical Medicine & Rehabilitation	-	-	-	60.00	50.00	
berculosis						
Mental Health	-	-	100.00	-	100.00	
Custodial Care Facility	-	-	-	66.67	50.00	
ewborn Infants	-	50.00	-	28.57	36.00	
NICU	-	25.00		42,86		
ERATIONS:						
otal Operations	316	309	201	2900	2744	+5.69
Major	173	137	94	1196	1239	-3.47
inor	143	172	107	1704	1505	+13.22
PATIENT VISITS:						
Total Visits	2601	2791	2438	30,847	34,206	-10.89
mergency Visits	517	696	506	7456	4892	+52.41
NTAL HEALTH:						
Total Outpatients Visits	68	148	108	1702	1529	+11.31
otal Day Care Patient Days	450	379	580	4614	3872	+19.16

tal Days Care Rendered (con't)

Other Medicare Patients

Over 65	296	3498	5145
Under 65	7	5	191
Others over 65	169	224	3598

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Total Days Care rendered (continued)	This Month	Last Month	This mo Last Year	This Fiscal Year to date	Last Fiscal Year to date	% of Increased or Decreased
Constant Care Unit & ICU						
Medicare						
Over 65 yrs. old	21			75		
Under 65 yrs. old				8		
Other patients over 65 yrs. old				31		
Skilled Nursing Facility						
Medicare						
Over 65 yrs. old	70			682		
Under 65 yrs. old						
Other patients over 65 yrs. old				124		
Mental Health						
Medicare						
Over 65 yrs. old						
Under 65 yrs. old						
Other patients over 65 yrs. old						
Hemodialysis Unit						
Medicare						
Over 65 yrs. old						
Under 65 yrs. old						
Other patients over 65 yrs. old						
Intermediate Care Facility						
Medicare						
Over 65 yrs. old				1686		
Under 65 yrs. old						
Other patients over 65 yrs. old	163	191		354		
Newborn Infants						

Increased - Decreased

APPENDIX E

SCHEDULE OF DATA PROCESSING REPORTS

SYSTEMS	SCHEDULES	REPORTS	USERS
[illegible]is	Monday thru Friday	a. Final Census	Admission Data Processing Central Document Control Director of Fiscal Services
		b. Summary	Business Office Sister Dominica
Patient Billing	Monday thru Friday	a. Daily Revenue Report	Administrator
		b. Posting Control	~~Credit & Collection~~ C.O.
		c. Patient Balance	~~Credit & Collection~~ A.C.O.
		d. Payment Report	Business Office
		e. Revenue Summary	~~Director of Fiscal Services~~ A.C.O.
		f. Revenue Usage	~~Business Office~~ A.C.O.
		g. Billing Transmittal	Business Office
		h. L.O.L. Transmittal	~~Accounting~~ B.O.
		i. Revenue In-Billing Report	Business Office
		j. Hospital In-Billing Revenue	Accounting
		k. Mental Health In-Billing	Accounting
		l. Bills	Business Office
		m. Labels	Business Office
Outpatient Billing	Monday thru Thursday	a. Daily List of New Accounts	Admission
		b. Revenue Report	Administrator
		c. Payment Report	Business Office
		d. Revenue Summary	~~Director of Fiscal Services~~ A.C.O.
		e. Revenue Usage	~~Business Office~~ A.C.O.
		f. Billing Transmittal	Business Office
		g. L.O.L. Transmittal	~~Accounting~~ B.O.
		h. Revenue Out-Billing	Business Office
		i. Hospital Out-Billing	Accounting
		j. Mental Health Out-Billing	Accounting
		k. Bills	B.O. ~~Central Document Control~~ Business Office
		l. Labels	Business Office
Accounts Receivable	Friday the 10th or 10th of each month	a. Small Balance Write-Off	Accounting/Business Office
		b. Zero Balance	Business Office Accounting (Only month-End)

SYSTEMS	SCHEDULES	REPORTS	USERS
Accounts Receivable (con't)	10th + 13th	c. A/R by Financial Class Aging	Business Office
	10th + 13th	d. A/R Alpha Aging	Business Office
	10th	e. Statements	Business Office
	10th	f. Guarantor's List	Business Office/ Credit & Collection
ayment Report	8th	a. Payments	Business Office/ Accounting/Credit & Collection
	8th	b. Debit & Credit (Non-Cash Adjustment)	Business Office/ Accounting/Credit & Collection
	8th	c. Abatements	Business Office/ Accounting/Credit & Collection
venue Report	8th	a. Revenue Usage Summary	Business Office/ Accounting
	8th	b. Revenue Usage	Business Office/ Accounting/Revenue Producing Departments
billed Revenue Report	8th	a. Unbilled Revenue Report	Accounting
ate Billing	6th	a. Revenue Summary	Accounting
	6th	b. Revenue Usage	Business Office
	6th	c. Billing Transmittal	Business Office
	6th	d. L.O.L. Transmittal	Accounting
	6th	e. Revenue In-Billing	Business Office
	6th	f. Hospital In-Billing	Accounting
	6th	g. Mental Health In-Billing	Accounting
	6th	h. Bills	Business Office
e Abstract	25th	a. Reports	Medical Records
mi-Annual Case Abstract	25th	a. Reports	Medical Records

SYSTEMS	SCHEDULES	REPORTS	USERS
roll	Bi-Weekly Wednesday	Labor Distribution	Payroll
	Wednesday	Combine Deduction	Payroll
	Wednesday	Time Balance	Payroll
	Thursday	All Other Reports	Payroll
	Thursday	Checks	Payroll
	Thursday	Guam Housing	Guam Housing
	Thursday	Rent	Guam Housing
	Thursday	Labor Distribution Summary	Administrator/ Division Heads

APPENDIX F

NURSE AIDE I

NATURE OF WORK IN THIS CLASS:

This is para-professional nursing work involved in performing specific patient care tasks, as assigned by a registered professional nurse in clinics, hospital and/or other Public Health settings.

Employees in this class work in accordance with established policies, procedures and standard practices and techniques. Work is closely supervised and reviewed for compliance with oral or written instructions.

ILLUSTRATIVE EXAMPLES OF WORK:

HOSPITAL

Assists the nursing staff in performing variety of tasks such as washing, sterilizing equipment and instruments, simple dressing, maintaining patient rooms and nursing units neat and orderly.

Serves and feeds patients and fills water pitchers.

Bathes, shaves, dresses patients and attends to any personal needs.

Passes and empties bedpans and collects urine and fecal specimens.

Assists in taking blood pressures, temperatures, pulse and respiration rate.

Assists in walking and transporting patients by means of wheelchair or stretcher; passes out nourishments.

Assists with care of patients in skeletal traction.

Does bed making of open, occupied, anesthetic and closed beds.

Records intake and output of patients.

Performs urine testing of patients for clinitest and acetone; prepping and catheterization.

Performs related work as required.

PUBLIC HEALTH

Provides safe and healthful environment for patients.

Assists in personal care of patients in the home and clinic setting.

Assists physician or nurse in patient examination and treatment.

Weighs, measures, and takes temperature, pulse and respiratory of patients in clinics and other Public Health setting.

Retrives and files clinic records.

Prepares supplies and equipments for clinic use.

Collects and prepares specimen for routine urine and stool tests.

Assists in the preparation and collection of information for the clinic reports.

Cleans and sterilized clinic equipment.

Performs other related functions as assigned.

MINIMUM KNOWLEDGES, ABILITIES, AND SKILLS:

Ability to do simple procedures and techniques involved in performing auxiliary nursing services.

Ability to do routine cleaning and maintain patient care units and to attend to personal needs of patients.

Ability to understand and follow simple oral and written instructions.

Ability to keep and maintain simple records.

Ability to communicate effectively orally and in writing.

Ability to develop and maintain patience and tact in dealing with patient and relatives.

Ability to establish and maintain effective working relationship with other employees and the public.

MINIMUM EXPERIENCE AND TRAINING:

No experience or training required. The minimum knowledges, abilities and skills above are required.

OTHER NECESSARY REQUIREMENTS:

Employee on selection must satisfactorily complete an acceptable nurses aide training program or a similar on-the-job training program as a necessary requirement for successfully completing the six months probationary period of employment.

SECOND APPROVED AMENDED SPECIFICATION: DECEMBER, 1976

DAVID R. FLORES, Executive Director
Civil Service Commission

NURSE AIDE II

NATURE OF WORK IN THIS CLASS:

HOSPITAL

This is responsible para-professional work involved in maintaining a safe and hygienic working environment of patients in a given patient care unit or in the care, maintenance and preparation of surgical instruments and supplies and the operating room; or in the care of patients in the Emergency Room/Outpatient Department and assisting registered professional nurses in other related activities in the hospital.

Employees in this class work under general supervision of a professional nurse or charge nurse in accordance with established policies, procedures, and standard nursing practices and techniques. Work is reviewed through reports, ward inspections and observations in compliance with oral and written instructions.

PUBLIC HEALTH

This is responsible para-professional nursing work involved in performing and recording patient care services, maintaining a safe and hygienic patient and working environment, and assisting registered professional nurse in clinics and other Public Health settings.

Employees in this class work in accordance with established policies, procedures, and standard nursing practices and techniques. Work is closely reviewed for compliance with oral or written instructions.

ILLUSTRATIVE EXAMPLES OF WORK:

HOSPITAL

Takes and records routine hearing and vision screening tests, simple urine tests, routine nursing data on vital signs such as blood pressure, temperature, pulse, and respiration rate, and intake and output of patients.

Performs routine work in the care of patients, such as making beds, changing linens, giving baths and rubs, lifting and moving patients, and caring for personal effects.

Prepares patients for surgery by shaving; assists in the preparation of the operating room for surgery; prepares supplies; cleans instruments and other items for autoclaving.

Assists the professional nurse during emergencies as in cardiopulmonary resuscitations.

Performs simple nursing services that would enhance the physical, social, and mental comfort of the patient and family.

Participates in feeding patients not able to feed themselves.

Assists in planning and providing recreational activities for patients.

Administers ointments and lotion.

Performs related work as required.

In the Operating Room:

Prepares the operating room, surgical instruments, and patient for operation.

Positions instruments, surgical supply, and other tables in the operating room.

Sterilizes surgical instruments for operating room; sterilizes articles in autoclave, by boiling or placing in antiseptic solutions, using sterile techniques prescribed by the hospital, and stores them in appropriate place.

Cleans and maintains a large variety of delicate surgical instruments and equipment including polishing and sharpening of needles.

Sets up oxygen, carbon dioxide, and anesthetic tanks by standard procedures.

Assembles, wraps, and sterilizes packs, and treatment and dressing trays following standard make-up for each type of pack or tray.

Prepares such sterile supplies as dressing, gloves, towels, gowns, rubber tubing, syringes, and needles.

Cleans used articles returned from the wards by washing and drying according to established hospital procedures.

Works closely with the surgeon and anticipates needs of the surgeon.

Issues sterile and non-sterile supplies and equipment for use in care and treatment of patients in the wards.

Performs related work as required.

In the Emergency Room:

Obtains vital signs and reports same to the registered nurses.

Assists the nurse in preparing a patient for treatment by the doctor.

Cleans affected areas with a specified preparation, and applies dressings as needed.

Transports patients to the ward or department via the designated means of transportation.

Cleans instruments and equipment after each use.

Checks supplies daily and replenishes them as needed.

Checks equipment daily to insure proper functioning.

Shaves operative sites for surgery, performs catheterizations as instructed.

Collects specimens required and bring them to the appropriate department.

Assists in emergency procedures such as cardio-pulmonary resuscitation.

Performs related work as required.

PUBLIC HEALTH

Prepares for clinics, such as the physical set-up, assemble health service records, and preparing patients for examinations by a nurse or a physician.

Assists physician or nurse in patient examination and treatment.

Performs and records routine hearing and vision screening tests and simple urine tests.

Provides personal care services within the clinic or home settings.

Performs services that would enhance the physical and mental comfort of the patient and his family.

Takes and records patients' vital signs such as temperature, pulse, respiration, blood pressure, height, weight and head circumference.

Retrieves and files patients' records.

Assists in the preparation and collection of information for the clinic reports.

Makes notification home visits as directed by the Public Health Nurse.

Cleans and sterilizes clinic equipments.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES, AND SKILLS:

HOSPITAL

Working knowledge of simple nursing procedures and techniques involved in performing moderately difficult auxiliary nursing services for patients.

Working knowledge of the materials used and the processes involved in the assigned unit, labor and delivery and operating room housekeeping operations.

Ability to keep required records and charts.

Ability to prepare patient reports and assist in maintaining patient records.

Ability to work under close supervision and to follow verbal and written instructions.

Ability to exercise emotional control and conceal natural aversion for certain patient condition.

Ability to establish and maintain effective working relationships with other employees and the public.

Ability to express oneself clearly and concisely, orally and in writing.

In the Operating Room:

Working knowledge of the principles, practices, techniques, and equipment used in the operating room.

Working knowledge of hospital regulations concerning sterilization and prescribed methods of preparing equipment and supplies for use.

Some knowledge of proper maintenance and storage of sterile supplies and equipment.

Ability to exercise emotional control and conceal natural aversion to certain patient conditions.

Ability to understand and to follow oral and written instructions.

Ability to keep stock records and to prepare reports.

Ability to establish and maintain effective working relationships with other employees and the public.

In the Emergency Room:

Working knowledge of first aid as offered by many public school systems and other community agencies.

Working knowledge of the operation of medical equipment in the department.

Ability to establish and maintain effective working relationships with fellow-employees and the general public.

Ability to understand and follow oral and written instructions.

Must have good command of the English language and the ability to write legibly.

Skill in the use and care of medical equipment.

Ability to keep clinical records and charts.

Ability to exercise emotional control and conceal natural aversion for certain patient's condition.

Ability to establish and maintain effective working relationships with employees and the public.

MEDICAL TECHNOLGIST IV

NATURE OF WORK IN THIS CLASS:

This is professional medical technology work which involves the performance of the most difficult and advanced tests, examinations and analysis in one or more specialized fields of medical technology, and assisting in the general operation of a large laboratory. The work regularly includes the testing and use of new and unusual procedures required by physicians requiring continual awareness of advances in medical technology, the establishment, review and revision of laboratory methods, procedures and techniques; and positions in instructing and overseeing all other laboratory staff.

ILLUSTRATIVE EXAMPLES OF WORK:

Researches for new and/or unusual procedures requested by physicians and tests reliability and procedures for practically; tests and recommends changes in technical methods, procedures and techniques employed in the laboratory; assists in reviewing operating procedures; instructs and oversees other staff members in behalf of a top-level technologist and serves in his absence; keeps records and prepares report; performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Thorough knowledge of principles and practices of medical technology.
Working knowledge of the overall requirements for effectively providing medical technology services in a hospital, institution or agency.
Working knowledge of trends in medical technology.
Ability to review and develop the services of a laboratory.
Ability to maintain a continual awareness of current developments in medical technology and provide leadership in maintaining adequate services.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from an approved school of medical technology plus four years of progressively responsible professional experience as a medical technologist of which one year of experience must have been comparable with that of the next lower grade in this Series.

(b) Any acceptable combination of experience and training.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration as a registered medical technologist approved by the American Society of Clinical Pathologist (ASCP).

Established 10/71

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MEDICAL TECHNOLOGIST V

NATURE OF WORK IN THIS CLASS:

This is professional medical technology work which involves responsibility for planning, organizing, coordinating, reviewing, and directing a large laboratory in a hospital or other laboratory setting. A position in this class is responsible for the maintenance of effective relationships with physicians and others regarding services requested and rendered and for supervising a staff of several medical technologists in charge of assigned sections and carrying out various activities required for the effective managment of the laboratory, such as budget estimating, seeing that adequate supply levels are maintained, and recommending equipment purchases.

ILLUSTRATIVE EXAMPLES OF WORK:

Plans, organizes, coordinates, directs and reviews all activities of a laboratory; maintains the overall quality and quantity of services provided; makes assignments and maintains effective relationships with and between subordinates; makes performance evaluations on subordinates; prepares budget estimates and justifications; obtains approval for equipment and supplies, and prepares requisitions; keeps inventory; maintains effective relationships with other medical units; gives consultations and advice in one or more fields of speciality; reviews and revises operating procedures; reads technical literature and keeps abreast of developments in medical technology; maintains records and prepares records and reports; performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Thorough knowledge of the overall requirements for effectively providing medical technology services in a hospital or a laboratory setting.

Considerable knowledge of the principles and practices of supervision.

Ability to organize, coordinate, and direct the services of a large laboratory.

Ability to maintain effective relationship with subordinates.

Ability to work with other medical personnel in providing effective services.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from an approved school of medical technology, plus five years of progressively responsible professional experience as a medical technologist of which one year of experience must have been comparable with that of the next lower grade in this Series; or

(b) Any acceptable equivalent combination of experience and training.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration as a registered medical technologist approved by the American Society of Clinical Pathologist (ASCP).

PUBLIC HEALTH

Working knowledge in home nursing and first aide as offered by many public school systems and other community agencies.

Ability to keep clinical records and charts.

Ability to work under close supervision and to follow oral and written instructions.

Ability to exercise emotional control and conceal natural aversion for certain patient condition.

Ability to establish effective working relationships with other employees and the public.

Ability to communicate effectively orally and in writing.

Skill in the operation of a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING:

(a) One year experience as a nurse aide; or

(b) Any equivalent combination of experience and training which provides the minimum knowledges, abilities, and skills.

OTHER NECESSARY REQUIREMENTS:

PUBLIC HEALTH

Possession of a current Guam Driver's License.

THIRD APPROVED AMENDED SPECIFICATION: DECEMBER, 1976

DAVID R. FLORES, Executive Director
Civil Service Commission

STAFF NURSE I

NATURE OF WORK IN THIS CLASS:

This is entry professional nursing work involved in rendering nursing care to patients within an assigned unit in the hospital.

An employee in this class performs a variety of professional general nursing functions in the care and treatment of physically ill patients. The more routine nursing functions are performed with relative independence in accordance with established rules, regulations and standard practices of the nursing profession. Work requiring more advanced nursing skills are performed under the close supervision of a higher level nurse or a physician. Work is reviewed through observations, submission of reports and conferences. Work may involve leading and guiding the work of subordinate auxiliary personnel.

ILLUSTRATIVE EXAMPLES OF WORK:

Participates in rendering care and treatment of patients in a general or specialized nursing unit.

Observes patients' conditions; administers medications and treatments as prescribed by physicians; takes histories and keeps charts; records symptoms, reactions and results of treatments, reporting any deviations from normal conditions to superior.

Participates in planning, directing and coordinating total patient care.

Assists physician in preparing patients for physical examinations, treatments, tests and operations; sets up treatment trays, prepares instruments and other equipment.

Assists in administering specialized therapy with complicated equipment.

May lead and instruct subordinate auxiliary personnel and participates in the routine work of patient care, including making beds, changing linens, serving food, lifting, moving, giving baths, rubbing back and caring for personal effects.

Takes temperature, pulse and respiration; checks blood pressure; obtains specimens for laboratory examination; administers blood transfusion and other intravenous therapy.

Participates in meetings and unit conferences relative to patient diagnosis, behavior and treatment of patients.

Instructs patients or relatives concerning home care, prevention of illness and promotion of good health.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES AND SKILLS:

Working knowledge of the principles, theory and practices of professional nursing, including those basic knowledges related to nursing, such as biological, physical, social and medical sciences, and their applications for better understanding of patient-care problems.

Working knowledge of the methods of prevention and control of communicable and infectious diseases.

Some knowledge of hospital dietetics, personal hygiene and bedside nursing.

Ability to learn and apply the principles, practices, techniques and equipment used in the specialized nursing units such as in the operating room, labor and delivery rooms, constant care unit, hemodialysis, nursery, outpatient department/ emergency room may be required.

Ability to administer detailed therapeutic prescriptions.

Ability to develop skills in detailed observation, reporting, and keeping records of indicative signs and symptoms of patients' mental, emotional, and physical conditions.

Ability to establish and maintain effective working relationships with others.

Ability to maintain records and charts and to prepare reports.

Ability to maintain a sympathetic attitude towards an effective relationship with physically ill patients and to their families.

Ability to instruct non-professional personnel in the routine care and treatment of the physically ill.

MINIMUM EXPERIENCE AND TRAINING:

Graduation from an accredited school for professional nurses with an Associate of Arts degree or diploma in nursing.

NECESSARY SPECIAL REQUIREMENT:

Possession of a current license as a Registered Professional Nurse on Guam.

FIRST AMENDED APPROVED
SPECIFICATION

NOVEMBER 1976

DAVID R. FLORES, Executive Director
Civil Service Commission

STAFF NURSE II

NATURE OF WORK IN THIS CLASS:

This is responsible professional nursing work involved in rendering nursing care to patients within an assigned unit in the hospital.

An employee in this class performs a variety of professional general or specialized nursing functions in the care and treatment of physically ill patients requiring more advanced nursing skills. Work is performed with considerable independence in accordance with established rules, regulations and standard practices of the nursing profession. Work is reviewed through observations, conferences and submission of reports. Work may involve leading and guiding the work of subordinate nurses and auxiliary personnel.

ILLUSTRATIVE EXAMPLES OF WORK:

Performs a wide variety of comprehensive general or specialized nursing duties in specialized units requiring application of the difficult and complex nursing skills and techniques.

Administers a wide variety of treatment regiment according to physician's orders.

Interprets to relatives and visitors the significance and progress of treatment; instructs patients or their families concerning home care, prevention of illness and promotion of good health.

Participates in developing and implementing plans for patient care.

Participates in conducting research work for the development of nursing program.

Participates in meetings and conferences relative to patient diagnosis, behavior and treatment of patients.

May lead and instruct subordinate nurses and other auxiliary personnel.

Maintains records and prepares reports.

Performs other related work as required.

MINIMUM KNOWLEDGES, ABILITIES AND SKILLS:

Considerable knowledge of the principles, practices and theory of professional nursing, including those basic knowledges related to nursing, such as biological, physical, social and medical sciences, and their applications for better understanding of patient care problems.

Considerable knowledge of the principles, practices, techniques and equipment used in specialized nursing units of the hospital may be required.

Considerable knowledge of the methods of prevention and control of communicable and infectious diseases.

Considerable knowledge of hospital dietetics, personal hygiene and bedside nursing.

Ability to make work decisions in accordance with professional standards, rules and regulations and to apply departmental policies and procedures to work problems.

Ability to administer detailed therapeutic prescriptions.

Ability to understand and follow oral and written instructions.

Ability to establish and maintain effective working relationships with others.

Ability to interpret and explain the purposes and methods of prescribed treatments and necessity for continuing such treatments to concerned individuals.

Ability to maintain records and charts and to prepare reports.
Ability to instruct subordinate nurses and auxiliary personnel in the care and treatment of the physically ill.
Ability to maintain a sympathetic attitude towards an effective relationship with physically ill patients and to their families.

MINIMUM EXPERIENCE AND TRAINING:

(a) Graduation from an accredited college or university with a Bachelor's degree in nursing; or.
(b) Graduation from an accredited school for professional nurses with an Associate of Arts degree or diploma in nursing, and two years of progressively responsible experience in professional nursing.

NECESSARY SPECIAL REQUIREMENT:

Possession of a current license as a Registered Professional Nurse on Guam.

FIRST AMENDED APPROVED
SPECIFICATION

NOVEMBER 1976

DAVID R. FLORES, Executive Director
Civil Service Commission

STAFF NURSE III

NATURE OF WORK IN THIS CLASS:

This is responsible professional nursing work in rendering nursing care to patients with responsibility for overseeing the activities of an assigned unit in the hospital during a particular shift.

An employee in this class, as a charge nurse, is responsible for directing and overseeing the activities of an assigned unit during the evening or night shift and performing highly complex and advanced nursing work. Work involves directing and instructing subordinate nurses and auxiliary personnel in nursing care activities in either a generalized or specialized program. Work is performed with considerable independence and initiative in accordance with established rules, regulations and standard practices of the nursing profession. Work is reviewed through observations, conferences and submission of reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Assumes charge of a nursing unit during an assigned shift; directs, instructs, and reviews the work of assigned subordinate personnel engaged in patient care and treatment at the hospital.

Performs highly difficult and complex general or specialized nursing functions in specialized units.

Administers a wide variety of treatment regiment according to physician's orders.

Oversees visiting periods; answers inquiries concerning patient welfare, care, and general progress.

May initiate appropriate emergency measures, in accordance to the policies of the hospital.

Participates in staff conferences, meetings, staff development and in-service training programs.

Supervises the maintenance of records and the preparation of reports.

Makes rounds of the ward with physician; assesses and evaluates the needs of the patient; implements appropriate nursing care plan.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the principles, practices and theory of professional nursing, including those basic knowledges related to nursing such as biological, physical, social and medical sciences, and their applications for better understanding of patient care problems.

Considerable knowledge of the principles, practices, techniques and equipment used in specialized nursing units of the hospital may be required.

Considerable knowledge of the methods of prevention and control of communicable and infectious diseases.

Considerable knowledge of hospital dietetics, personal hygiene and bedside nursing.

Ability to manage the activities of an assigned nursing unit within the hospital.

NURSE SUPERVISOR I

NATURE OF WORK IN THIS CLASS:

This is responsible professional and supervisory work in the care and treatment of physically ill patients within the hospital.

An employee in this class directs and supervises the nursing care and activities of a single patient-care unit. The employee supervises professional nurses and auxiliary personnel, and is responsible for the application of proper nursing principles and techniques in the care and treatment of patients within the assigned unit. The employee exercises considerable independent judgment and initiative in accordance with professional nursing standards, established regulations and policies of the hospital. Work is reviewed through ward visits, conferences and submission of reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Plans, assigns, supervises and administers the nursing services of a single patient care unit involving either a generalized or specialized program.

Supervises the application of nursing techniques required in the care and treatment of patients in assigned unit; instructs and interprets physicians' orders to subordinates, assuring that orders are properly executed.

Prepares work schedules for unit personnel and establishes standards of quality care in cooperation with superior.

Makes rounds of inspection of assigned unit; reviews reports and gives direction to subordinate personnel regarding the care of patients, ward equipment, health and safety conditions.

Plans, conducts and coordinates orientation and training program for subordinates.

Reviews the unit facilities and makes recommendations for improvement to superior.

Answers inquiries relating to nursing services of the unit.

Assists superior in analyzing and determining staffing requirements for the unit.

Participates in meetings; plans and conducts periodic conferences with subordinates.

Supervises the maintenance of records and the preparation of required reports.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the principles, practices, methods and theory of professional nursing, and application of techniques in providing hospital nursing care to patients, including those basic knowledges related to nursing such as biological, physical, social and medical services, and their application for better understanding of patient care problems.

Considerable knowledge of the methods of prevention and control of communicable and infectious diseases.

Working knowledge of the principles, practices, methods and techniques of training and supervision involved in nursing services administration.

Ability to supervise the application of nursing techniques to routine and complex patient care situations. or Coordinate

Ability to plan, and supervise the work of others.

Ability to make work decisions in accordance with professional standards, rules and regulations, and to apply departmental policies and procedures to work problems.

Ability to administer detailed therapeutic prescriptions.

Ability to train and instruct professional and non-professional nursing personnel.

Ability to establish and maintain effective working relationships with others.

Ability to maintain a sympathetic attitude towards an harmonious relationship with patients and to develop such attitudes in subordinates and students directed or supervised.

Ability to supervise the maintenance of adequate records of assigned unit.

Ability to express oneself clearly, concisely, and effectively, both orally and in writing.

MINIMUM EXPERIENCE AND TRAINING:

(a) Graduation from an accredited college or university with a Master's degree in nursing, administration or closely related field, and one year of responsible professional nursing work; or

(b) Graduation from an accredited college or university with a Bachelor's degree in nursing, and two years of progressively responsible experience in professional nursing; or

(c) Graduation from an accredited school for professional nurses with an Associate of Arts degree or a diploma in nursing, and four years of progressively responsible experience in professional nursing.

NECESSARY SPECIAL REQUIREMENT:

Possession of a current license as a Registered Professional Nurse on Guam.

FIRST AMENDED APPROVED
SPECIFICATION
NOVEMBER, 1976

DAVID R. FLORES, EXECUTIVE DIRECTOR
CIVIL SERVICE COMMISSION

NURSE SUPERVISOR II

NATURE OF WORK IN THIS CLASS:

This is responsible professional and supervisory work in managing the nursing services of an area consisting of two or more patient units within the hospital.

An employee in this class directs and supervises through subordinate supervisors the nursing care and activities of assigned nursing area within the hospital involving generalized and/or specialized programs, or acts as supervisor incharge of nursing department on assigned shift. The employee exercises considerable independent judgment and initiative in accordance with professional nursing standards, established regulations and policies of the hospital. Work is reviewed through ward visits, conferences and submission of reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Plans, directs, and supervises the nursing services of assigned area within the hospital consisting of two or more nursing units involving generalized and/or specialized programs.

Acts as supervisor-in-charge of nursing department on assigned shift.

Maintains quality of nursing care in the area supervised through observations made during unit rounds, by analysis of reports of nursing services rendered and by training and instruction of subordinates.

Maintains adequacy of nursing coverage in the units supervised by assignment of personnel and securing of emergency help.

Plans, develops and coordinates orientation and in-service training and staff development programs to develop and maintain good patient care and nursing service.

Interprets and explains new procedures and policies to subordinates.

Periodically visits patients in assigned area to insure maximum care and to ascertain need for additional or modified services.

Assists in recruiting, selecting and retaining qualified nursing and auxiliary personnel.

Assists the admissions office in the assignment of patients to rooms and coordinates transfers of patients within the hospital.

Answers inquiries relating to nursing services.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES AND SKILLS:

Thorough knowledge of the principles, practices and theory of professional nursing and application of techniques in providing hospital nursing care to patients, including those basic knowledges related to nursing such as biological, physical, social and medical sciences, and their application for better understanding of patient care problems.

Thorough knowledge of the methods of prevention and control of communicable and infectious diseases.

Considerable knowledge of the principles, practices, methods and techniques of training and supervision involved in hospital nursing services.

pital Nurse Supervisor II

Knowledge of the trends and current developments in hospital nursing administration.

Ability to direct or supervise the application of nursing techniques to routine and complex patient care situations in assigned nursing units.

Ability to plan and supervise the work of others.

Ability to make work decisions in accordance with professional standards, rules and regulations, and to apply departmental policies and procedures to work problems.

Ability to establish and maintain effective working relationships with others.

Ability to supervise the maintenance of adequate records of nursing services.

Ability to express oneself clearly, concisely and effectively, both orally and in writing.

MINIMUM EXPERIENCE AND TRAINING:

(a) Graduation from an accredited college or university with a Master's degree in nursing, administration or closely related field, and two years of progressively responsible professional nursing work, including one year in an administrative or supervisory capacity; or

(b) Graduation from an accredited college or university with a Bachelor's degree in nursing, and three years of progressively responsible experience in professional nursing, including one year in an administrative or supervisory capacity; or

(c) Graduation from an accredited school for professional nurses with an Associate of Arts degree or a diploma in nursing, and five years of progressively responsible experience in professional nursing, including one year in an administrative or supervisory capacity.

NECESSARY SPECIAL REQUIREMENT:

Possession of a current license as a Registered Professional Nurse on Guam.

FIRST AMENDED APPROVED
SPECIFICATION
NOVEMBER, 1976

DAVID R. FLORES, EXECUTIVE DIRECTOR
CIVIL SERVICE COMMISSION

X-RAY TECHNOLOGIST

NATURE OF WORK IN THIS CLASS:

This is difficult and responsible professional technical work which involves not only in the performance of diagnostic or therapeutic x-ray services but also including administrative activities, teaching, and research projects. Employee in this class exercises responsibility for patient care from radiation since some of the equipment and materials involved in taking x-rays are essentially hazardous to human beings. Employee in this class works directly under and is immediately responsible to the Radiologist for work being performed in the X-Ray Department. Work involves reviewing and supervising the work of subordinate x-ray technicians. Work is reviewed through the analysis of x-ray exposures, conferences, and the submission of regular reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Formulates techniques based on standards established by the American Registry of Radiologic Technologist, etc., suitable to the needs and present function of the X-Ray Department on consultation with the Radiologist.

Applies roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes.

Positions patient between the x-ray tube and the film and cover body areas not to be exposed to the rays with a protective lead plate; sets up or adjusts devices to prevent the patient from moving; adjusts switches regulating length and intensity of exposure; develops film in accordance with photographic techniques.

Supervises and teaches technicians in the performance of special radiologic examinations.

Performs x-ray and radium treatments or applications under the direction of the Radiologist.

Assists in research projects.

Performs tests to determine efficiency of the x-ray machines and other equipment, e.g. cassettes, screens, film processing devices, etc. periodically to determine maintenance requirements.

Prepares reports and maintains records of services rendered.

Makes periodic checks on the stock of supplies and makes timely recommendations.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS:

Thorough knowledge of the methods and techniques of x-ray and fluoroscopic radiography including arranging patients.

Considerable knowledge of human anatomy as related to radiographic work.

Considerable knowledge of the hazards involved in the use of x-ray equipment and of precautionary measures to be employed.

Ability to understand and follow oral and written instructions.

Ability to establish and maintain effective working relationships with patients and medical staff members.

Ability to maintain records of x-ray work and x-ray exposures and to prepare reports from such records.

Skill in adjusting and operating equipment and processing and developing films.

Skill in the application of standard x-ray and fluoroscopic techniques to individual cases.

DESIRABLE EXPERIENCE AND TRAINING:

Graduation from a school of x-ray technology approved by the Council on Medical Education and Hospitals of the American Medical Association (AMA), plus two years of professional experience as an x-ray technologist.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration by the American Registry of Radiologic Technologist (American Registry of X-Ray Technicians).

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X-RAY TECHNICIAN I

NATURE OF WORK IN THIS CLASS:

This is technical work at the entry level involved in assisting in the operation of x-ray equipment and in learning to develop x-ray photographs. Under close supervision of a senior X-Ray Technician and Radiologist, work is performed in accordance with established procedures and techniques. Work is reviewed while in process of x-ray operations and through the analysis of photographs. Working knowledge of the principles and practices of x-ray technology is required.

ILLUSTRATIVE EXAMPLES OF WORK:

Assists in performing X-Ray services involving the operation and maintenance of equipment.

Takes, develops, and level X-Ray photographs and plates involving standardized routine procedures.

Prepares solutions, and sets up X-Ray photographs and plates.

Assists in the maintenance of equipment.

Performs related work as required.

REQUIRED KNOWLEDGES, ABILITIES AND SKILLS:

(a) Graduation from high school preferably including courses in mathematics, physics, chemistry, biology, or photography; or

(b) Any accpetable equivalent combination of experience and training.

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X-RAY TECHNICIAN II

NATURE OF WORK IN THIS CLASS:

This is responsible technical work involved in operating x-ray equipment for the purpose of taking and developing x-ray photographs. Under supervision of a senior X-Ray Technician and Radiologist, work is performed in accordance with established procedures and techniques. Work is reviewed through the analysis of photographs and conferences with superior. Working knowledge of the principles and practices of x-ray technology is required.

ILLUSTRATIVE EXAMPLES OF WORK:

Performs x-ray services involving the operation and maintenance of equipment.

Takes, develops, and levels x-ray photographs and plates involving standardized routine procedures.

Prepares solutions, develops and sets up x-ray photographs and plates.

Numbers and identifies x-ray films, enters x-ray film numbers in record books, and prepares report of work accomplished.

Performs related work as required.

REQUIRED KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the methods and techniques of x-ray photography.

Working knowledge of human anatomy as it relates to radiographic work.

Working knowledge of the hazards involved in the use of x-ray equipment and of precautionary measures to be used.

Ability to understand and follow oral and written instructions.

Ability to establish and maintain effective working relationships with patients and medical staff members.

Ability to maintain simple records of x-ray work and x-ray exposures and to prepare reports from such records.

Skill in adjusting and operating equipment and processing and developing films.

REQUIRED EXPERIENCE AND TRAINING:

(a) Graduation from high school, plus two years of experience in performing x-ray work under the general direction of a radiologist; or

(b) Any acceptable equivalent combination of experience and training.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from high school, plus four years of progressive experience in performing x-ray work under the general direction of a Radiologist; or

(b) Any acceptable equivalent combination of experience and training.

X-RAY TECHNICIAN III

NATURE OF WORK IN THIS CLASS:

This is difficult and responsible technical work involved in the operation of x-ray and fluoroscopic equipment in the taking of plates and pictures and in administering x-ray therapy treatments. Work is performed under the supervision of a Radiologist and is performed in accordance with established procedures and techniques. Employees in this class are expected to operate equipment independently and without immediate supervision. Work is reviewed through the analysis of plates and pictures and through consulation with Radiologist. Work may involve the supervision of subordinate x-ray technicians. Considerable knowledge of the principles and practices of x-ray technology is required.

ILLUSTRATIVE EXAMPLES OF WORK:

Prepares patients for x-ray and gives instructions regarding breathing and position requirements during x-ray examination or treatments.

Loads and unloads cassettes, determines length of exposure, calibrates equipment according to prescribed tables, takes x-rays, and develops, finishes and washes x-ray films.

Makes minor adjustments and repairs of x-ray and fluoroscopic equipment; prepares solutions for developing and finishing x-ray plates; may also operate photofluorographic equipment used in tuberculosis clinics.

Operates x-ray equipment in the administration of x-ray therapy following orders of the Radiologist regarding length and intensity of treatment; observes and reports patient's reactions.

Numbers and identifies x-ray films, enters x-ray film numbers in record books, and prepares reports of work accomplished.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS:

Thorough knowledge of the methods and techniques of x-ray and fluoroscopic photography including arranging patients.

Considerable knowledge of human anatomy as related to radiographic work.

Working knowledge of the hazards involved in the use of x-ray equipment and of precautionary measures to be employed.

Ability to understand and follow oral and written instructions.

Ability to establish and maintain effective working relationships with patients and medical staff members.

Ability to maintain simple records of x-ray work and x-ray exposures and to prepare reports from such records.

Ability to express oneself clearly and concisely, orally and in writing.

Skill in adjusting and operating equipment and processing and developing films.

Skill in the application of standard x-ray and fluoroscopic techniques to individual cases.

EMERGENCY ROOM TECHNICIAN

NATURE OF WORK IN THIS CLASS:

This is technical work involved in the care of patients in the Emergency Room/Outpatient Department.

Employees in this class work under general supervision of a professional registered nurse and/or physician in accordance with established policies, procedures and standard nursing practices and techniques.

ILLUSTRATIVE EXAMPLES OF WORK:

Assists the professional registered nurses and/or the physicians in emergency procedures such as deliveries in emergency room, ambulance, or in a private vehicular within the hospital's premise, cardiac resuscitation procedures; tracheostomy procedures; orthopedic procedures (closed reduction, dislocation, splinting, application of casts).

Performs removal of orthopedic casts, sutures and dressings.

Prepares instruments and supplies required in the suturing of wounds; assists the physician in the procedure such as prepping, sponging, cutting of sutures, and application of dressing.

Obtains brief medical history of the nature of illness from patients and reports findings to the registered nurse and/or physician.

Obtains and records vital signs of patients and reports abnormal findings to the registered nurse and/or physician.

Obtains laboratory specimens; performs simple urine tests, vision and hearing testing.

Assists the nurse and/or the physician in the preparation and application of equipment and supplies required for treatment, oxygen therapy, intermittent positive pressure breathing, resuscitating, cardiac monitoring, defibrillatoring, suctioning, etc.

Performs some clerical functions in the absence of ward clerks or as necessary in making appointments, filling out laboratory requests, coding of fees for services rendered.

Transports patients to the ward on a department via the designated means of transportation.

Applies and removes steri-strips and dressings under the supervision of a physician.

Assists in the debridement of wounds.

Provides instructions to patients regarding the usage of crutches.

Cleans surgically affected areas with specified preparation.

Cleans instruments and equipment after each use.

Checks and orders supplies daily and replenishes them as needed.

Assists in the management of violent patients.

Conducts informal on-the-job orientation and training for lower-level employees.

Applies cooling measures as ordered by the physician.

Performs and records inventory of personal belongings of patients as indicated.

Performs related work as required.

MINIMUM KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the general principles, methods, materials and practices employed in the emergency room.

Considerable knowledge in the use, operation and maintenance of the equipment used in the Emergency Room and the use of sterile techniques and first-aid procedures.

Ability to learn and understand medical terms and procedures relating to the work.

Ability to establish and maintain effective working relationships with professional groups, fellow-employees, patients and the general public.

Skill in the use and care of equipment and instruments used within Emergency Room.

Ability to express oneself clearly, concisely, orally and in writing.

Ability to keep clinical records and charts.

Ability to work odd hours of the day since the hospital operates 24 hours a day, seven days a week.

Ability to exercise emotional control in working with patients.

Ability to understand and follow oral and written instructions.

MINIMUM EXPERIENCE AND TRAINING:

(a) Two years experience as a nurse's aide, one year ~~of which must have been~~ including in an Emergency Room/Outpatient Department; or

(b) Any equivalent combination of experience and training which provides the minimum knowledges, abilities and skills.

SECOND APPROVED AMENDED SPECIFICATION: DECEMBER, 1976

DAVID R. FLORES, Executive Director
Civil Service Commission

NATURE OF WORK IN THIS CLASS:

The Operating Room Technician is under the direct supervision of the Operating Room nurses classified as non-professional personnel. The technician is permitted to directly assist the surgeon during operations.

Under general supervision, work is performed independently in accordance with established procedures and techniques. Supervision may be exercised over hospital attendants assigned to the Surgical Department.

ILLUSTRATIVE EXAMPLES OF WORK:

Prepares the operating room, surgical equipment and patient for operation.

Prepares instrument table for the surgical operation.

Sterilizes surgical instruments and surgery bundle for use in the operating room.

Prepares such sterile supplies as dressing, gloves, towels, gowns, rubber tubing, syringes and needles.

Be able to identify, clean and maintain a large variety of delicate surgical instruments and equipment.

Maintains inventory records and determines adequacy of stock on hand by visual inspection; requisitions for additional stocks or replacements.

Performs related work as directed.

DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS:

Working knowledge of the principles, practices, techniques, and equipment used in operating rooms.

Working knowledge of the principles, practices, procedures, and techniques of sterilization.

Working knowledge of hospital regulations concerning sterilization and prescribed methods of preparing equipment and supplies for use.

Some knowledge of proper maintenance and storage of sterile supplies and equipment.

Ability to understand and to follow oral and written instructions.

Ability to keep stock records and to prepare reports.

Ability to establish and maintain effective working relationships with hospital personnel.

REQUIRED EXPERIENCE AND TRAINING:

(a) Graduation from high school or possession of a certificate of high school equivalency (GED) plus two years of experience as an Operating Room Technician I; or

MICROBIOLOGIST I

NATURE OF WORK IN THIS CLASS:

This is entry professional and technical work involved in performing elementary analytical microbiological analyses and examinations by applying scientific principles and techniques as applied to such fields as medicine and public health, including but not limited to, testing of food, dairy, water products, water pollution control, human and animal diseases, and such other programs coming under the cognizance of the Division of Public Health.

Employees in this class work under close supervision and direction and are given detailed instructions at the beginning of work and subsequent new assignments to insure compliance with established policies, procedures, program objectives, and professional standards. Work is reviewed through conferences, work accomplishments, and submission of reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Examines the growth, structure, development, and general characteristics of blood, feces, urine, sputa or other specimens for microbiological agents of disease by microscopic and cultural methods.

Performs routine bacteriological examinations of water, sewage, and industrial wastes.

Performs standard bacteriological and microscopic examinations of canned foods, milk, and other dairy products.

Performs elementary professional work involved in the production and testing of vaccines, toxins, toxoids, and antisera for potency and safety.

Tests blood specimens for the presence of agglutinins or other antibodies in diagnostic titer; prepares records and reports of analyses performed and the results of diagnoses.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Working knowledge of the principles, theories, and practices of microbiology and organic chemistry and of modern chemical laboratory methods, procedures, materials, and equipment.

Working knowledge of the operation and care of microscopes, glasswares, analytical balances, centrifuges, water baths, autoclaves, and other laboratory equipment.

Working knowledge of scientific methodology as related to laboratory specialties and of the hazards of laboratory activities.

Some knowledge of physics, biochemistry, and related sciences, and in the setting up, care, and use of laboratory equipment.

Ability to maintain accurate laboratory records and prepare simple activity reports.

Ability to erect simple combinations of laboratory apparatus, and to operate less complex types of laboratory equipment.

Ability to understand and follow oral and written directions, standard laboratory formulas, and charts.

Ability to express oneself clearly, concisely, and effectively, orally and in writing.

6.113

Skill and dexterity in the use and care of various laboratory apparatus and in following standard laboratory methods and procedures.

DESIRABLE EXPERIENCE AND TRAINING:

Graduation with a Bachelor's degree from a recognized college or university in microbiology, chemistry, biology, or closely related field.

4/10/69

MICROBIOLOGIST II

NATURE OF WORK IN THIS CLASS:

This is difficult and responsible profcssional and technical work involved in performing analytical micorbiological analyses and examinations by applying scientific principles and techniques as applied to such fields as medicine and public health, including but not limited to, testing of food, dairy, and water products, water pollution control, human and animal diseases, and such other programs coming under the cognizance of the Division of Public Health.

Employees in this class work under limited supervision and direction and are given general insturctions at the beginning of work to insure compliance with established policies, procedures, program objectives, and professional standards. Work is reviewed through conferences, work accomplishments, and submission of reports.

ILLUSTRATIVE EXAMPLES OF WORK:

Performs qualitative and quantitative bacteriological analyses of water, sewage, streams, industrial wastes, etc.; prepares reports on results of tests.

Performs independent professional microbiological examinations of a wide variety of foods, beverages, dairy products, and water.

Examines specimens for diagnosis of infectious diseases.

Conducts chemical analyses of substances such as acids, alcohols, and enzymes produced by bacteria and other micro-organism or organic matter.

Compiles and maintains records of examinations performed and prepares reports on examinations conducted.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the principles, theories, and practices of microbiology and organic chemistry and of modern chemical laboratory methods, procedures, materials, and equipment.

Considerable knowledge of the operation and care of microscopes, glass-wares, analytical balances, centrifuges, water baths, autoclaves, and other laboratory equipment.

Considerable knowledge of the scientific methodology related to laboratory specialties and of the hazards of laboratory activities.

Working knowledge of physics, biochemistry, and related sciences, and in the setting up, care, and use of laboratory equipment.

Ability to maintain accurate laboratory records and prepare moderately difficult or scientific activity reports.

Ability to erect simple combinations of laboratory apparatus, and to operate less complex types of laboratory equipment.

Ability to understand and follow oral and written instructions, standard laboratory formulas, and charts.

Ability to express oneself clearly, eccisely, and effectively, orally and in writing.

Skill and dexterity in the use and care of various laboratory apparatus and following standard laboratory methods and procedures.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation with a Master's degree from a recognized college or university in microbiology, chemistry, biology, or closely related field, plus one year of responsible experience in performing professional analytical micriobiological work, qualitative or quantitative analysis, or closely related area; or

(b) Graduation with a Bachelor's degree from a recognized college or university in microbiology, chemistry, biology, or closely related field, plus two years of progressively responsible experience in performing professional analytical microbiological work, qualitative or quantitative analysis, or closely related area.

4/10/69

MICROBIOLOGIST III

NATURE OF WORK IN THIS CLASS:

This is highly difficult and responsible professional and technical work involved in performing analytical microbiological analyses and examinations by applying scientific principles and techniques as applied to such fields as medicine and public health, including but not limited to, testing of foods, dairy, and water products, water pollution control, and human and animal diseases, and other programs under the cognizance of the Division of Public Health.

Under the general administrative supervision and direction of the Medical Laboratory Supervisor, employees in this class work with considerable latitude in the exercise of independent judgment and actions in accordance with established policies, procedures, program objectives, and professional standards. Work is reviewed through conferences, work accomplishments, and submission of reports. Supervision may be exercised over subordinate staff and other laboratory personnel having overall supervision.

ILLUSTRATIVE EXAMPLES OF WORK:

Studies growth, structure, development, and general characteristics of bacteria and other micro-organism; isolates and makes cultures of significant bacteria or other micro-organisms in prescribed or standard inbilitory media, controlling factors, such as moisture, areation, temperature, and nutrition.

Cultivates, isolates, and identifies micro-organisms by systamatic studies of the morphological, cultural, physical, and biochemical characteristics of tissues, body fluids, excreta, lesions, water, sewage, and industrial waste.

Observes action of micro-organisms upon living tissues of plants, higher animals, and other micro-organisms and on dead organic matter.

Makes chemical analyses of substances, such as acids, alcohols, and enzymes produced by bacteria and other micro-organisms on organic matter.

Conducts research work and provides consultative services in laboratory specialty to laboratory personnel.

Develops and interprets scientific data, draws conclusion, and prepares reports.

Compiles and maintains records of examinations performed and prepares reports on results of tests.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Thorough knowledge of the principles and practices of microbiology and organic chemistry and of modern chemical laboratory methods, procedures, materials, and equipment.

Thorough knowledge of the operation and care of microscopes, glassware, analytical balances centrifuges, water baths, autoclaves, and other laboratory equipment.

Thorough knowledge of scientific methodology as related to laboratory specialities and of the hazards of laboratory activities.

Considerable knowledge of physics, biochemistry, and related sciences, and in the setting up, care, and use of laboratory equipment.

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Ability to direct and supervise the work of laboratory staff or a staff performing related work in the field.

Ability to independently perform a variety of complex microbiological examinations and mathematical calculations and to prepare scientific reports therefrom.

Ability to develop and maintain cooperative relationships with subordinates, other departments, manufacturers, plant operators, and the general public.

Ability to do research work in microbiological analyses and organic chemistry, and to apply results obtained in the improvement of standard analytical techniques and methods.

Ability to originate and direct complex research work.

Ability to express oneself clearly, concisely, and effectively, orally and in writing.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation with a Master's degree from a recognized college or university in microbiology, chemistry, biology, or closely related field, plus three years of progressively responsible experience in performing professional analytical microbiological work, qualitative or quantitative chemical analysis, or closely related area; or

(b) Graduation with a Bachelor's degree from a recognized college or university in biology, chemistry, or closely related field, plus four years of progressively responsible experience in performing professional analytical microbiological work, qualitative or quantitative chemical analysis, or closely related area.

Additional education beyond the Master's degree may be substituted on a year for year basis for qualifying general experience lacking.

4/13/69

MEDICAL LABORATORY TECHNICIAN I

NATURE OF WORK IN THIS CLASS:

This is semi-professional work at the entry level involved in performing simple laboratory assignments in all sections of the laboratory. Employees in this class are under close supervision, but work may be performed independently as sufficient experience are acquired to take over assignments personally.

ILLUSTRATIVE EXAMPLES OF WORK:

Prepares bbod smears; draws blood for serology, biochemistry, etc.
Assists in the preparation of reagents.
Assists in sterilizing glassware and equipment.
Assists in maintaining simple records and checking reports for accuracy of identification data.
Distributes and psts laboratory results.
Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Ability to perform simple laboratory routines with respect to the receipt, identification, and routing of various types of specimens, and the preparation and routing of reports.
Ability to develop familiarity with basic apparatus and equipment, laboratory methods and techniques.
Ability to make simple arithmetical computations.
Ability to sustain attention to details.
Ability to deal pleasantly and efficiently with patients in obtaining specimens for laboratory test.
Ability to develop and maintain good working habits.
Ability to express oneself clearly and concisely, orally and in writing.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Satisfactory completion of one year of college with courses in chemistry, biology, mathematics, or closely related field; or
(b) Graduation from high school with courses in chemistry, biology, mathematics, or closely related field, plus one year of experience in medical laboratory work; or
(c) Any acceptable equivalent combination of experience and training.

REVISED 10/71

MEDICAL LABORATORY TECHNICIAN II

NATURE OF WORK IN THIS CLASS:

This is semi-professional work involved in assisting technologists or higher level technicians in performing special examinations, or performing responsible laboratory assignments in the operation of the laboratory. Employees in this class work under general supervision, but work may be performed independently as assigned. Work is reviewed upon completion of desired results and objectives in accordance with oral and/or laboratory procedures.

ILLUSTRATIVE EXAMPLES OF WORK:

Draws or collects specimens in wards.
Takes red blood, white blood count, differential count, etc.
Keeps equipment and glassware clean.
Assists in keeping records of section.
Distributes and posts laboratory results.
Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Some knowledge of general laboratory routines, procedures, apparatus, and equipment, and terminology.

Some knowledge in the use of basic laboratory techniques applicable to the various fields of specialization.

Ability to prepare fairly complex solutions in accordance with specific and detailed instructions.

Ability to make simple arithmetical computations.
Ability to sustain attention to numerous details
Ability to deal with professional and technical personnel, and patients.
Ability to develop and maintain good working habits.
Ability to express oneself clearly and concisely, orally and in writing.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Satisfactory completion of one year of college with courses in chemistry, biology, or mathematics, or closely related field, plus one year of responsible experience comparable to that of the next lower grade in this series; or
(b) Graduation from high school with courses in chemistry, biology, math, or closely related field, plus two years of progressively responsible experience in medical laboratory work, of which one year of experience must be comparable to that of the next lower grade in this series; or
(c) Any acceptable equivalent combination of experience and training.

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MEDICAL LABORATORY TECHNICIAN III

NATURE OF WORK IN THIS CLASS:

This is responsible semi-professional work involved in the performance of general or specialized laboratory examinations. Employees in this class may take charge in the supervision of the Medical Laboratory Section in the absence of the supervisor. Work may involve the supervision and teaching of Medical Laboratory Technicians I and II and other subordinate laboratory assistants. Work is reviewed through inspections, submission of reports, and through conferences.

ILLUSTRATIVE EXAMPLES OF WORK:

Performs chemistry examinations such as chemical tests and analyses of body fluids, excretions, tissues, uric acid test, non-protein nitrogen, and other materials related to clinical medicine.

Assists technologists in laying out plans and schedules for his particular section, including improvements in laboratory procedures, equipment, supplies, and maintenance.

Prepares reports regarding technical problems encountered and problems relating to the work relationships among subordinate staff members.

Assists technologists in conducting research projects, personally performing specialized or difficult work.

Assists and supervises medical technicians of lower grade in giving informal on-the-job training in the absence of a professional technologists.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the various tests and standard clinical laboratory procedures applicable to the various fields of specialization.

Ability to prepare complex solutions in accordance with specific and detailed instructions.

Ability to perform complex technical procedures with accuracy.

Ability to deal with professional and technical personnel, and patients.

Ability to originate, plan, and perform work as assigned.

Ability to develop and maintain good working habits.

Ability to train subordinate Medical Laboratory Technicians and Laboratory assistants.

Ability to express oneself clearly and concisely, orally and in writing.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Satisfactory completion of three years of college with courses in chemistry, biology, mathematics, or closely related field, plus one year of responsible experience in biochemistry, histology, hematology, bacteriology, parasitology, blood bank, or urine analysis; or

MEDICAL LABORATORY TECHNICIAN IV

NATURE OF WORK IN THIS CLASS:

This is highly technical medical laboratory work involved in the performance of a wide range of routine laboratory tests in the various fields of medical technology in accordance with well-defined procedures and policies, under the supervision of a Medical Technologist. Work is reviewed while in process and upon review for accuracy and adherence to established policies and procedures.

ILLUSTRATIVE EXAMPLES OF WORK:

Conducts a wide range of routine laboratory tests, examinations, and procedures in the various fields of Medical Technology.

Under close supervision, performs hematological, biochemical, parasitological, bacteriological, immunological, and seriological work, including typing and crossmatching of blood and urinalysis, takes blood from patients, does blood counts, reticulocyte and platelet counts, hemaglobins, sedimentation rates, and describing the various types of cells, morphology, examines fecals, urine, blood and other specimens in the presence of parasites and ova and identifies them; performs various qualitative and quantitative biochemical tests. Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS:

Considerable knowledge of the various tests and standard clinical laboratory procedures applicable to the various fields of specialization.

Ability to prepare complex solutions in accordance with specific and detailed instructions.

Ability to perform complex technical procedures with accuracy.

Ability to designate, plan, and perform work as assigned, and to develop and maintain good working habits.

Ability to train subordinate laboratory technicians and aides.

Ability to express oneself clearly and concisely, orally and in writing.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Satisfactory completion of a bachelor's degree in biology or chemistry, or closely related field, plus one year of responsible experience in medical laboratory work.

(b) Any acceptable equivalent combination of experience and training.

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(b) Graduation from high school with courses in biology, chemistry, mathematics, or closely related field; plus four years of progressively responsible experience in biochemistry, histology, hematology, bacteriology, parasitology, blood bank, or urine analysis; or

(c) Any acceptable equivalent combination of experience and training.

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MEDICAL TECHNOLOGIST I

NATURE OF WORK IN THIS CLASS:

This is professional medical technology work at the entry level which involves the performance of a limited range of laboratory tests in the various fields of medical laboratory. Employees in this class are assigned to work in the various fields of medical technology in order to learn and to attain proficiency in various procedures and techniques employed. An incumbent at this level works under close supervision until he is able to operate independently. Assignments are given in order to equip the incumbent with sufficient knowledge, skill, and ability to successfully assume and perform higher level work. Work is reviewed while in progress and upon completion for accuracy.

ILLUSTRATIVE EXAMPLES OF WORK:

Undergoes orientation in order to become familiarized with the various procedures and techniques employed at the laboratory.

Under close supervision, performs hemotological, biochemical, parasitological, bacteriological, immunological, and seriological work, including typing and crossmatching of blood and urinanalysis, takes blood from counts, reticulocyte and platelet counts, hemoglobins, hematocrits, sedamentation rates, and makes differential counts describing the various types of cell, morphology, examines fecal, wine, blood and other specimens for the presence of parasites and ova and identifies them, performs qualitative and quantitative biochemical tests.

Performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Some knowledge of the basic principles and practices of medical technology and fundamental principles of chemistry and the biological sciences.

Ability to use and care for laboratory equipment and appratus.

Ability to learn standard techniques and procedures employed in the various fields of medical technology.

Ability to perform laboratory tests accurately and attend to required details for extended period of time.

Ability to keep records and prepare reports.

Ability to make mathematic calculations.

Ability to receive oral and written instructions.

Ability to deal effectively with patients and staff.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from an approved school of medical technology.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration as a Registered Medical Technologist approved by the American Society of Clinical Pathologist (ASCP).

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MEDICAL TECHNOLOGIST II

NATURE OF WORK IN THIS CLASS:

This is professional medical technology work which involves the performance of a wide range of laboratory tests in the various fields of medical technology in accordance with standard techniques and well-defined procedures and policies under the supervision of a higher-level Medical Technologist. An incumbent at this level is able to operate independently on a regular basis and in emergencies. Performance of special and more complex tests may be required in assisting a higher level Medical Technologist in emergency conditions is for purpose of training under close supervision.

ILLUSTRATIVE EXAMPLES OF WORK:

Performs hematological, biochemical, parasitological, bacteriological, immunological, and serological work, including typing and corssmatching of blood and urinalysis; takes blood from various types of patients; does blood counts, reticulocyte and platelet counts, hemoglobins, hematocrits, sedimentation rates, and makes differential counts describing the various types of cells present as to their morphological characteristics; examines fecal, urine, blood and other specimens for the presence of parasites and ova and identifies them; performs various qualitative and quantitative biochemical tests; performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES & SKILLS:

Working knowledge of basic principles and practices of medical technology and fundamental principles of chemistry and the biological sciences.

Ability to use and care for laboratory equipment and apparatus.

Ability to perform laboratory tests accurately and attend to required details for extended period of time.

Ability to keep records and prepare reports.

Ability to make mathematic calculations.

Ability to give and receive oral and written instructions.

Ability to deal effectively with patients and staff.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from an approved school of medical technology, plus two years of professional experience as a medical technologist.

(b) Any acceptable equivalent combination of experience and training.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration as a Registered Medical Technologist approved by the American Society of Clinical Pathologist (ASCP).

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MEDICAL TECHNOLOGIST III

NATURE OF WORK IN THIS CLASS:

This professional medical technology work which involves the performance of the full range of laboratory tests in one or more fields, including technical responsibility for the particular area or areas of laboratory services assigned. Work is performed within a framework of established policies and procedures, but judgment is regularly required in the selection of procedures and techniques and the evaluation of results. Work is performed under the general supervision of a top-level Medical Technologist. A Medical Technologist III may assign and review the work of a lower-level technologist, laboratory technicians and other assistant or assistants.

ILLUSTRATIVE EXAMPLES OF WORK:

Plans and organizes the services required of a section of a large laboratory pertaining to one or more fields, and collects specimens and performs the various tests and examination analysis required; provides technical assistance in research and investigation programs; collects additional samples; calibrates instruments and equipment, and standardize solutions; keeps records and submits reports; performs related work as required.

DESIRABLE KNOWLEDGES, ABILITIES, AND SKILLS:

Considerable knowledge of the principle and practices of medical technology pertinent to the assigned field or fields, and of the principals of chemistry and the biological sciences.

Ability to plan, organize, and schedule work activities to provide the services of a section of a large laboratory.

Ability to use and care for laboratory equipment and apparatus.

Ability to perform laboratory tests accurately and attend to required details for extended periods of time.

Ability to make mathematic calculations.

Ability to give oral and written instructions.

Ability to deal effectively with patients and hospital staff.

DESIRABLE EXPERIENCE AND TRAINING:

(a) Graduation from an approved school of Medical Technology, plus three years of progressively responsible professional experience as a Medical Technologist

(b) Any acceptable equivalent combination of experience and training.

NECESSARY SPECIAL QUALIFICATION:

Possession of a current certificate of registration as a registered Medical Technologist approved by the American Society of Clinical Pathologist (ASCP).

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