Appendices V and VI

Chapter 5.0 and 6.0 Appendices

Data Collection and Analysis for Generating Procedure-Specific Practice Expense Estimates (HCFA Contract No. 500-95-0009)

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various stages of dependency, setting priorities and deadlines for patient care, and modifying nursing care as necessary prior to notifying the supervisor. In situation 2), LPN's are assigned to a selected group of critically ill patients, e.g., in hospital intensive care or coronary care units. These assignments require LPN's to immediately recognize and respond to serious situations, sometimes prior to notifying an RN. However, their overall independence and authority are more limited than those described in situation 1, and supervisory approval is required for proposed deviations from established guidelines.

Hospitals. Under direct supervision of an RN, provides nursing care to critically ill patients in such areas as intensive care or coronary care. Duties, while similar to the more complex responsibilities described at level II, are performed under stressful conditions requiring special techniques and procedures in reacting to life-threatening situations and in providing basic patient care. Evaluates appropriateness of planned treatment, given the patient's condition, and proposes modifications to RN.

Mental health/resident care/nursing homes. Duties are similar to those described at level II. However, these LPN's are authorized to adapt, if necessary, nursing care methods and procedures to meet changing patient needs.

Excluded are LPN's above level III. Such positions not only provide difficult nursing care to a selected group of critically ill patients, but also set priorities and deadlines for patient care, and modify nursing care prior to notifying the supervisor.

NURSING ASSISTANTS

Provides personal and nursing care to patients in hospitals, nursing homes, resident care facilities, clinics, homes, and community health organizations. Duties include maintaining patient hygiene and supporting doctors and nurses in diagnostic procedures, technical treatments, patient charting, and patient teaching. Work does not require State licensure. Supervisory positions are excluded.

Nursing Assistants I

Performs simple personal care and housekeeping tasks requiring no previous training. Typical tasks include: Bathing, dressing, feeding, lifting, escorting, and transporting patients; collecting laundry carts and food trays; taking and recording temperatures; and changing bed linen and cleaning patient's room. Follows detailed and specific instructions.

Nursing Assistants II

In addition to providing personal care, performs common nursing procedures such as: Observing and reporting on patient conditions; taking and recording vital signs; collecting and labeling specimens; sterilizing equipment; listening to and encouraging patients; giving sitz baths and enemas; applying and changing compresses and nonsterile dressings; checking and replenishing supplies; securing admission data from patients; and assisting in controlling aggressive or disruptive behavior. Follows specific instructions; matters not covered are verified with the supervisor.

NOTE: Positions receiving additional pay for performing the above duties duties and responsibilities in *forensic* units of mental health institutions are matched at level III. Workers in such positions must regularly use skill in influencing and communicating with patients who display abusive or resistant behavior.

Nursing Assistants III

Performs a variety of common nursing procedures as described at level II. Work requires prior experience or training to perform these procedures, with some latitude for exercising independent initiative *or* limited judgment. May also: Perform several procedures sequentially; chart patient care; administer prescribed medication and simple treatments; teach patient self-care; and lead lower level nursing assistants.

NOTE: Positions receiving additional pay for performing the above duties and responsibilities in *forensic* units of mental health institutions are matched at level IV. (See *NOTE* for level II.)

Nursing Assistants IV

Applies advanced patient or resident care principles, procedures, and techniques which require considerable training and experience. In addition to the work described at level III, typical duties include: Assisting professional staff in planning and evaluating patient or resident care; recognizing subtle changes in patient's condition and behavior and varying nursing care accordingly; catheterizing, irrigating, and suctioning patients; monitoring intravenous fluids and alerting registered nurse when system needs attention; and performing minor operative and diagnostic procedures in a clinic. Supervisor describes limitations or priorities of work.

Excluded are nursing assistants above level IV. Workers in these excluded positions typically participate (rather than assist) in planning and modifying patient or resident care; function as co-therapists in mental health therapy sessions; or coordinate treatment activities with patients, families, and faculty staff. *Also excluded* are positions receiving additional pay for performing level IV duties and responsibilities in *forensic* units of mental health institutions. (See *NOTE* for level II.)

MEDICAL MACHINE OPERATING TECHNICIANS

Operates and monitors medical machines, equipment, or instruments as part of the examination or treatment of patients in hospitals, clinics, or other medical establishments.

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Work is subordinate to the work of physicians or other professional employees. Work involves medical machines, equipment, or instruments used in:

Cardiac catheterization;
Electrocardiography (EKG);
Electroencephalography (EEG);
Pumping and oxygenating the blood during open-heart surgery, or in treating patients with obstructed pulmonary or coronary arteries or serious heart trouble;
Hemodialysis;
Controlling the pressure in a hyperbaric-oxygen chamber;
Inhalation/respiratory therapy;
Pulmonary function testing;
Ultrasonography (sonography) or thermography.

Excluded are:

a. Diagnostic and therapeutic radiologic technologists;

b. Laboratory technicians, medical technicians, and medical technologists; and

c. Medical machine aides or trainees performing tasksthat are preparatory or auxiliary to the complete examination and treatment of patients under close supervision.

Medical Machine Operating Technicians I

Performs standard examinations or treatments requiring little deviation from instructions or procedures. Assignments require skill in performing either 1) delicate measurements or machine adjustments, or 2) repetitive observations requiring subtle determinations. Works with patients who are generally cooperative.

Medical Machine Operating Technicians II

Performs examinations or treatments that require adapting techniques and procedures to individual assignments. Uses judgment to:

Vary test or treatment procedures according to patient's condition and to assess adequacy of results obtained under difficult circumstances (e.g., patient is too sick to cooperate);

Recognize when common test results or patient reactions indicate the need for either additional tests to pinpoint abnormalities or for consultation with a physician regarding changes to prescribed treatments; or

Perform procedures not covered by detailed instructions or that require variations to meet special needs outlined by a physician.

Frequently works with patients who are critically ill and require special procedures and handling. Recognizes adverse responses and initiates emergency procedures, such as cardiopulmonary resuscitation. Supervisor outlines general work objectives, priorities, and results expected. Work is reviewed for overall adequacy and compliance with general instructions.

Medical Machine Operating Technicians III

Performs complex examinations or treatments using a variety of established procedures that require a high degree of judgment and skill to:

Carry out many delicate and exacting steps and subtle discriminations, and to evaluate test results and patient responses to either determine appropriate machine adjustments or to select the methods and techniques that will produce the most effective results; and/or

Act as a team member in long, extensive, complex procedures that require alertness and precision to coordinate actions with others, and to make rapid and accurate observations or adjustments in accordance with precedents, in response to either physician demands or changes in patient's condition.

Supervisor provides few preliminary instructions; work is spotchecked. Technician requests assistance only when established procedures and techniques prove inadequate. Trains others to perform standard procedures.

Medical Machine Operating Technicians IV

Performs complex examinations or treatments that regularly require innovative and adaptive approaches. Performs complex and relatively new procedures or operates equipment for which accepted practices have not been established. Work requires extensive training and experience to:

Make decisions, in the absence of definitive instructions or directly related precedents, to remedy difficulties or to improve the accuracy of techniques in order to obtain unusually precise measurements or adjustments; and

Make precise discriminations in evaulating either patient reactions or data from monitoring equipment, and take appropriate actions, without instructions, to control or compensate for adverse reactions.

Participates in planning medical or experimental procedures involving new techniques. May train others in performing such techniques. Receives general guidance in anticipating possible problems. Supervisor usually relies on technician's judgment.

CIVIL ENGINEERING OR SURVEY TECHNICIANS/ CONSTRUCTION INSPECTORS

Provides semiprofessional support to engineers or related professionals engaged in the planning, design, management, or supervision of the construction (or alteration) of such structures as buildings, streets and highways, airports, sanitary systems, or flood control systems. Applies knowledge of the methods, equipment, and techniques of several of the following support functions:

Data compilation and analysis/design and specification—gathering, tabulating, and/or analyzing hydrologic and meteorologic information, quantities of materials required, traffic patterns, or other engineering data; or preparing project site layouts and specifications;

Testing—measuring the physical characteristics of soil, rock, concrete or other construction materials to determine methods and quantities required or to comply with safety and quality standards;

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level demonstrate a high degree of creativity, foresight, and mature judgment in planning, organizing, and guiding extensive engineering programs and activities of outstanding novelty and importance.

Direction received. Receives general administrative direction.

Typical duties and responsibilities include one or both of the following:

1. In supervisory capacity, is responsible for a) an important segment of a very extensive and highly diversified engineering program of a company or government agency, or b) the entire engineering program of a company or agency when the program is of moderate scope. The programs are of such complexity and scope that they are of critical importance to overall objectives, include problems of extraordinary difficulty that often have resisted solution, and consist of several segments requiring subordinate supervisors. Decides the kind and extent of engineering and related programs needed to accomplish the objectives of the company or agency, chooses scientific approaches, plans and organizes facilities and programs, and interprets results.

2. As individual researcher and consultant, formulates and guides the attack on problems of exceptional difficulty and marked importance to the company, industry, or government. Problems are characterized by their lack of scientific precedents and source material, or lack of success of prior research and analysis so that their solution would represent an advance of great significance and importance. Performs advisory and consulting work as a recognized authority for broad program areas or in an intensely specialized area of considerable novelty and importance.

Responsibility for the direction of others. Supervises several subordinate supervisors or team leaders, some of whose positions are comparable to engineer VII, or individual researchers some of whose positions are comparable to engineer VII and sometimes engineer VIII. As an individual researcher and consultant may be assisted on individual projects by other engineers or technicians.

Note: Individuals in charge of an engineering program may match any of several of the survey job levels, depending on the program's size and complexity. Excluded from the definition are: 1) engineers in charge of programs so extensive and complex (e.g., consisting of research and development on a variety of complex products or systems with numerous performing at level VIII; 2) individuals whose decisions have direct and substantial effect on setting policy for the organization (included, however, are supervisors deciding the "kind and extent of engineering and related programs" within broad guidelines set at higher levels); and 3) individual researchers and consultants who are recognized as national and/or international authorities and scientific leaders in very broad areas of scientific interest and investigation.

REGISTERED NURSE (RN)

(29: Registered nurse)

Provides professional nursing care to patients in hospitals, nursing homes, clinics, health units, private residences, and community health organizations. (Visiting nurses are included.) Assists physicians with treatment; assesses patient health problems and needs; develops and implements nursing care plans; maintains medical records; and assists patients in complying with prescribed medical regimen. May specialize, e.g., operating room nurse, psychiatric nurse, nurse anesthetist, industrial nurse, nurse practitioner, and clinical nurse specialist. May supervise LPN's and nursing assistants.

Excluded are:

a. Nurse midwives;

b. Nursing instructors, researchers, and consultants *who do not provide nursing care to patients*;

c. Nursing supervisors and managers, e.g., head nurses, nursing coordinators, directors of nursing; and

d. RN trainees primarily performing such entry level nursing care as: recording case histories; measuring temperature, pulse, respiration, height, weight, and blood pressure; and testing vision and hearing.

Registered Nurse I

Provides comprehensive general nursing care to patients whose conditions and treatment are normally uncomplicated. Follows established procedures, standing orders, and doctor's instructions. Uses judgment in selecting guidelines appropriate to changing patient conditions. Routine duties are performed independently; variations from established routines are performed under specific instructions. Typical assignments include:

Staff. Prepares hospital or nursing home patients for tests, examinations, or treatment; assists in responding to emergencies; records vital signs and effects of medication and treatment in patient charts; and administers prescribed medications and intravenous feedings.

Operating Room. Assists in surgical procedures by preparing patients for less complex operations (e.g., appendectomies); sterilizes instruments and other supplies; handles instruments; and assists in operating room, recovery room, and intensive care ward.

Psychiatric. Provides routine nursing care to psychiatric patients. May observe and record patient behavior.

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Health Unit/Clinic. Administers immunizations, inoculations, allergy treatments, and medications in a clinic or employer health unit; performs first aid for minor burns, cuts, bruises, and sprains; obtains patient histories; and keeps records, writes reports, and maintains supplies and equipment.

Registered Nurse II

Plans and provides comprehensive nursing care in accordance with professional nursing standards. Uses judgment in assessing patient conditions, interprets guidelines, and modifies patient care as necessary. Recognizes and determines proper action for medical emergencies, e.g., calls physician or takes preplanned emergency measures. Typical assignments include:

Staff. In addition to the duties described at level I, usually performs more complex procedures, such as: administering blood transfusions; managing nasal-pharyngeal, gastric suction, and other drainage tubes; using special equipment such as ventilator devices, resuscitators, and hypothermic units; or closely monitoring postoperative and seriously ill patients.

Operating Room. Provides nursing service for surgical operations, including those involving complex and extensive surgical procedures. Confers with surgeons concerning instruments, sutures, prosthesis, and special equipment; cares for physical and psychological needs of patients; assists in the care and handling of supplies and equipment; assures accurate care and handling of specimens; and assumes responsibility for aseptic technique maintenance and adequacy of supplies during surgery.

Psychiatric. Provides comprehensive nursing care for psychiatric patients. In addition to observing patients, evaluates and records significant behavior and reaction patterns and participates in group therapy sessions.

Health Unit/Clinical. Provides a range of nursing services, including preventive health care counseling. Coordinates health care needs and makes referrals to medical specialists; assesses and treats minor health problems; advises whether employees should return to work, or be referred to physician; administers emergency treatment; performs limited portions of physical examinations; manages the stable phases of common chronic illnesses; and provides individual and family counseling.

Community Health. Provides a broad range of nursing services including adult and child health care, chronic and communicable disease control, health teaching, counseling, referrals, and follow-up.

Registered Nurse II Specialist

Plans and provides highly specialized patient care in a difficult specialty area, such as intensive care or critical care. In comparison with registered nurse II, pay typically reflects advanced specialized training, experience, and certification. May assist higher level nurses in developing, evaluating, and revising nursing plans. May provide advice to lower level nursing staff in area of specialty.

Registered Nurse III

Plans and performs specialized and advanced nursing assignments of considerable difficulty. Uses expertise in assessing patient conditions and develops nursing plans which serve as a role model for others. Evaluation and observation skills are relied upon by physicians in developing and modifying treatment. Work extends beyond patient care to the evaluation of concepts, procedures, and program effectiveness. Typical assignments include:

Specialists. Provides specialized hospital nursing care to patients having illnesses and injuries that require adaptation of established nursing procedures. Renders expertise in caring for patients who are seriously ill; are not responding to normal treatment; have undergone unique surgical operations; or are receiving infrequently used medication. Duties may require knowledge of special drugs or the ability to provide pulmonary ventilation.

Psychiatric Specialist. Provides nursing expertise on an interdisciplinary treatment team which defines policies and develops total care programs for psychiatric patients.

Practitioner. Provides primary health care and nursing services in clinics, schools, employer health units, or community health organizations. Assesses, diagnoses, and treats minor illnesses and manages chronic health problems. Other services may include: providing primary care for trauma cases, including suturing; planning and conducting a clinic, school, or employer health program; or studying and appraising community health services.

Registered Nurse III Anesthetist

Recommends and administers general anesthetics intravenously, topically, by inhalation, or by endotracheal intubation; induces patient anesthesia, and manages proper states of patient narcosis throughout prolonged surgeries. Determines the need for and administers parenteral fluids, including plasma and blood; administers stimulants as directed. May also administer local anesthetics, as needed.

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Registered Nurse IV

Plans, researches, develops, and implements new or modified techniques, methods, practices, and approaches in nursing care. Acts as consultant in area of specialization and is considered an expert or leader within specialty area. Consults with supervisor to develop decisions and coordinates with other medical staff and community. Typical assignments include:

Specialist/Consultant. Provides expert and complex hospital nursing and health care to a specialized group of patients. Develops and monitors the implementation of new nursing techniques, policies, procedures and programs; instructs nursing and medical staff in specialty; represents the specialty to outside organizations; and evaluates, interprets, and integrates research findings into nursing practices.

Practitioner. Serves as primary health advisor in clinics and community health organizations and provides full range of health care services. Manages clinic and is responsible for formulating nursing and health care standards and policies, including developing and teaching new techniques or practices and establishing or revising criteria for care. Collaborates with physician in planning, evaluating, coordinating, and revising program and determines conditions, resources and policies essential to delivery of health care services.

Administrative

BUDGET ANALYST

(141: Accountant, auditor, and other financial specialist)

Formulates and analyzes and/or administers and monitors an organization's budget. Typical duties include: Preparing budget estimates to support programs; presenting and justifying budget estimates; administering approved budgets and determining funding requirements within authorized limits; evaluating and administering requests for funds and monitoring and controlling obligations and expenditures; and developing and interpreting budget policies.

In addition to the technical responsibilities described in levels I through IV, budget analysts may also supervise subordinate staff members. At levels I and II, the subordinate staff typically consists of clerical and paraprofessional employees; level III may also coordinate the work of lower level analysts; and level IV may supervise one or two analysts. Positions responsible for supervising three or more budget analysts and support staff should typically be matched to the budget analyst supervisor definition.

Excluded are:

a. Budget clerks and assistants performing clerical work in support of budget analysts;

b. Program analysts evaluating the success of an organization's operating programs;

c. Financial analysts evaluating the financial operations, transactions, practices and structure of an organization; and

d. Budget analysts (above level IV) responsible for analyzing and administering highly complex budgets requiring frequent reprogramming and evaluating the impact of complicated legislation or policy decisions on the organization's budget.

Budget Analyst I

As a trainee, performs a variety of clearly-defined tasks assigned to increase the employee's knowledge and understanding of budget concepts, principles, practices, and rocedures. Assists in the development of budgets by comparing projected costs to schedules; or assists in budget administration by examining and highlighting obvious deviations in reports listing the status of financial obligations and expenditures. (Terminal positions are excluded.)

Work is performed under close supervision. Assignments are clearly defined, methods are specified, and items to be noted and referred to supervisor are identified.

Budget Analyst II

Performs routine and recurring budget analysis duties which typically facilitate more complex review and analysis performed by supervisors or higher-level budget analysts. Initial assignments are designed to expand practical experience and to develop judgment in applying basic budget analysis techniques. Follows specific guidelines and previous budget reports in analyzing budgets for operating programs which are uniform and repetitive. Typical duties include:

Budget development: Assisting operating officials in preparing budget requests and justifications by gathering, extracting, reviewing, verifying, and consolidating a variety of narrative and statistical data; examining budget requests for accuracy and conformance with procedures and regulations; and comparing budget requests with prior year estimates and current operating reports; and/or

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highway traffic; serves as party chief on conventional construction, property, topographical, hydrographic or geodetic surveys. Excluded are party chiefs responsible for unusually difficult or complex surveys.

Construction inspection - performs inspections for a variety of complete projects of limited size and complexity or a phase of a larger project, e.g., conventional one or two story concrete and steel buildings; park and forest road construction limited to clearing, grading and drainage. Interprets plans and specifications, resolves differences between plans and specifications, and approves minor deviations in methods which conform to established precedents.

Engineering Technician, Civil or Survey Technician/Construction Inspector V

Performs nonroutine and complex assignments involving responsibility for planning and conducting a complete project of limited scope or a portion of a larger, more complex project. Selects and adapts techniques, designs, or layouts. Reviews, analyzes and interprets the technical work of others. Completed work is reviewed for technical adequacy. Recommendations for major changes or costly alterations to basic designs are approved by supervisor. Performs a variety of such typical duties as:

Design and specification - prepares plans and specifications for major projects such as roads and airport runways, bridge spans, highway structures, or electrical distribution systems. Applies established engineering practice; calculates dimensions, elevations, and quantities; and selects and adapts precedents to meet specific requirements. Applies applicable standards and guidelines in resolving design problems; refers difficult or novel requirements to supervisor.

Construction inspection - Inspects projects of unusual difficulty and complexity, e.g., large multi-story hospitals or laboratories which include sophisticated electrical and mechanical equipment; airport runways for jet aircraft with exacting requirements. Independently interprets plans and specifications to resolve complex construction problems.

Construction monitoring - Monitors progress of specialized phases of construction projects. For example, develops or revises specifications for clearing land for excavation; and building access roads, utilities, construction offices, testing facilities, and maintenance and storage facilities. OR Investigates prospective contractor's capabilities, operating methods, and equipment; or reviews contractor's cost estimates and operating reports for use in computing periodic payments.

Engineering Technician, Civil or Survey Technician/Construction Inspector VI

Independently plans and accomplishes complete conventional projects or serves as an expert in a narrow aspect of a civil engineering field. Applies creativity and judgment to plan projects, resolve design problems, and adapt equipment, procedures, or techniques. Recommendations, plans, designs, and reports are reviewed for general adequacy and soundness of engineering judgment. Supervisor provides advice on unusual or controversial problems or policy matters. May direct or train lower level technicians.

Design and specification - Develops cost estimates for competitive bidding for a variety of multiple-use construction projects. Determines the construction processes involved, along with coordination and scheduling requirements. Compares types and capacities of construction equipment and calculates detailed cost estimates. OR Prepares designs and specifications for various utility systems of complex facilities; resolves design problems by adapting precedents or developing new design features.

Construction inspection and monitoring - Inspects and monitors progress of multi-use construction projects typically requiring more than a year for completion. Uses a knowledge of construction systems, practices, and processes to determine if projects are progressing according to contract requirements and organizational policies.

LICENSED PRACTICAL NURSE (LPN)

(366: Licensed practical nurse)

LPN's are licensed to provide practical or vocational nursing care to patients in hospitals, nursing homes, clinics, health units, homes, and community health organizations. They typically work under the supervision of a registered nurse or physician, and may supervise unlicensed nursing assistants.

LPN I

Provides standard nursing care requiring some latitude for independent judgment and initiative to perform recurring duties. Supervisor provides additional instructions for unusual or difficult tasks. Deviations from specific guidelines must be authorized by the supervisor. Typical assignments include:

Hospitals/nursing homes. As part of a nursing team, assists patients in attending to their personal hygiene; measures and labels routine specimens; records vital signs; provides routine treatments such as compresses, enemas, sterile dressings, and sitz baths; prepares and administers commonly prescribed medications; observes and reports on patient conditions; and teaches patient self care, repeating instructions previously provided by professional staff.

Mental health/resident care. As part of a nursing team, makes rounds of assigned area to count patients; observes patients for changes in behavior and checks for cleanliness; encourages patients to participate in recreational

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activities; maintains standard records of patients and medications; and administers first aid.

Clinics/community health organizations. Performs routine nursing procedures such as taking and recording height, weight, measurements, and vital signs. Performs vision, hearing, urine, and tuberculin skin tests; records test results. Administers medications ad immunizations under supervision of an RN; observes, records, and reports signs of illness or changes in patient condition; and assists physician with physical examination. May provide routine nursing care to the sick at home, reinforcing physician's instructions, checking medication and eating and sleeping habits, and inquiring about additional problems.

LPN II

Provides nursing care requiring an understanding of diseases and illnesses sufficient to enhance communication with physicians, registered nurses, and patients. Follows general instructions in addition to established policies, practices, and procedures. Uses judgment to vary sequence of procedures based on patient's condition and previous instructions. Supervisory approval for requested deviations is given routinely. Guidance is provided for unusual occurrences.

Hospital/nursing homes. As a responsible member of a nursing team, cares for patients in various stages of dependency (e.g., raging from those receiving general medical care to a selected few who are critically ill). Provides appropriate verbal and written information for patient care plans. In addition to the tasks described at level I, assignments may include more complex duties such as: catheterizing, irrigating, or suctioning patients; observing and reporting intravenous fluids; and assisting in resuscitation procedures.

Mental health/resident care. Provides input into nursing team conferences by interpreting patient nursing care needs and responses to therapy. In addition to the tasks described at level I, serves as a role model by performing and teaching self care; participates in therapy sessions by promoting self care and self worth; and records progress treatment plans.

Clinics/community health organizations. In addition to the duties described at level I, uses experience and judgment to perform more complex procedures such as: screening patients for health problems such as hypertension and diabetes, using judgment in deciding to refer patients to RN or physician; providing patient's treatment plan; coordinating selected clinic operations; giving irrigations and catheterizations, suctioning tracheotomies, and conducting electrocardiograms; or recertifying applicants for supplemental food programs when test results indicate nutritional deficiencies.

Employer health units. Uses judgment to perform moderately complex procedures such as: treating employees for minor illnesses and work related injuries, and referring difficult cases to RN or physician; observing reactions to drugs and treatments and reporting irregularities; assisting physicians with examinations and treatments; and maintaining records of occupational illnesses and injuries as required by Federal and State regulations.

LPN III

This level applies to two different work situations. In situation 1), LPN's provide nursing care for patients in various stages of dependency, setting priorities and deadlines for patient care, and modifying nursing care as necessary prior to notifying the supervisor. In situation 2), LPN's are assigned to a selected group of critically ill patients, e.g., in hospital intensive care or coronary care units. These assignments require LPN's to immediately recognize and respond to serious situations, sometimes prior to notifying and RN. However, their overall independence and authority is more limited than that described in situation 1 and supervisory approval is required for proposed deviations from established guidelines.

Hospitals. Under direct supervision of an RN, provides nursing care to critically ill patients in such areas as intensive care or coronary care. Duties, while similar to the more complex responsibilities described at level II, are performed under stressful conditions requiring special techniques and procedures in reacting to life-threatening situations and in providing basic patient care. Evaluates appropriateness of planned treatment, given the patient's condition, and proposes modifications to RN.

Mental health/resident care/nursing homes. Duties are similar to those described at level II. However, these LPN's are authorized to adapt, if necessary nursing care methods and procedures to meet changing patients needs.

Exclude LPN's above level III. Such positions not only provides difficult nursing care to a selected group of critically ill patients, but also set priorities and deadlines for patient care, and modify nursing care prior to notifying the supervisor.

NURSING ASSISTANT

(523: Nursing aide, orderly, and attendant)

Provides personal and nursing care to patients in hospitals, nursing homes, resident care facilities, clinics, private homes, and community health organizations. Duties include maintaining patient hygiene and supporting doctors and nurses in diagnostic procedures, technical treatments, patient charting and patient teaching. Work does not require a State license. Supervisory positions are excluded.

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Clerk, Accounting III

Uses a knowledge of double entry bookkeeping in performing one or more of the following: posts actions to journals, identifying subsidiary accounts affected and debit and credit entries to be made and assigning proper codes; reviews computer printouts against manually maintained journals, detecting and correcting erroneous postings, and preparing documents to adjust accounting classifications and other data; or reviews lists of transactions rejected by an automated system, determining reasons for rejections, and preparing necessary correcting material. On routine assignments, employee selects and applies established procedures and techniques. Detailed instructions are provided for difficult or unusual assignments. Completed work and methods used are reviewed for technical accuracy.

Clerk, Accounting IV

Maintains journals or subsidiary ledgers of an accounting system and balances and reconciles accounts. Typical duties include one or both of the following: reviews invoices and statements (verifying information, ensuring sufficient funds have been obligated, and if questionable, resolving with the submitting unit, determining accounts involved, coding transactions, and processing material through data processing for application in the accounting system); and/or analyzes and reconciles computer printouts with operating unit reports (contacting units and researching causes of discrepancies, and taking action to ensure that accounts balance). Employee resolves problems in recurring assignments in accordance with previous training and experience. Supervisor provides suggestions for handling unusual or nonrecurring transactions. Conformance with requirements and technical soundness of completed work are reviewed by the supervisor or are controlled by mechanisms built into the accounting system.

Note: *Excluded* from level IV are positions responsible for maintaining either a general ledger or a general ledger in combination with subsidiary accounts.

CLERK, GENERAL

(463: General office occupation)

Performs a *combination of clerical tasks* to support office, business, or administrative operations, such as: maintaining records; receiving, preparing, or verifying documents; searching for and compiling information and data; responding to routine requests with standard answers (by phone, in person, or by correspondence). The work requires a basic knowledge of proper office procedures. Workers at levels I, II, and III follow prescribed procedures or steps to process paperwork; they may perform other routine office support work, (e.g., typing, filing, or operating a keyboard controlled data entry device to transcribe data into a form suitable for data processing). Workers at level IV are also required to make decisions about the adequacy and content of transactions handled in addition to following proper procedures.

Clerical work is controlled (e.g., through spot checks, complete review, or subsequent processing) for both quantity and quality. Supervisors (or other employees) are available to assist and advise clerks on difficult problems and to approve their suggestions for significant deviations from existing instructions.

Excluded from this definition are: workers whose pay is *primarily* based on the performance of a *single* clerical duty such as typing, stenography, office machine operation, or filing; and other workers, such as secretaries, messengers, receptionists or public information specialists who perform general clerical tasks incidental to their primary duties.

Clerk, General I

Follows a few clearly detailed procedures in performing simple repetitive tasks in the same sequence, such as filing precoded documents in a chronological file or operating office equipment, e.g., mimeograph, photocopy, addressograph or mailing machine.

Clerk, General II

Follows a number of specific procedures in completing several repetitive clerical steps performed in a prescribed or slightly varied sequence, such as coding and filing documents in an extensive alphabetical file, simple posting to individual accounts, opening mail, running mail through metering machines, and calculating and posting charges to departmental accounts. Little or no subject-matter knowledge is required, but the clerk needs to choose the proper procedure for each task.

Clerk, General III

Work requires a familiarity with the terminology of the office unit. Selects appropriate methods from a wide variety of procedures or makes simple adaptations and interpretations of a limited number of substantive guides and manuals. The clerical steps often vary in type or sequence, depending on the task. Recognized problems are referred to others.

Typical duties include a combination of the following: maintaining time and material records, taking inventory of equipment and supplies, answering questions on departmental services and functions, operating a variety of office machines, posting to various books, balancing a restricted group of accounts to controlling accounts, and assisting in preparation of budgetary requests. May oversee work of lower level clerks.

Clerk, General IV

Uses some subject-matter knowledge and judgment to complete assignments consisting of numerous steps that vary in nature and sequence. Selects from alternative methods and

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refers problems not solvable by adapting or interpreting substantive guides, manuals, or procedures.

Typical duties include: assisting in a variety of administrative matters; maintaining a wide variety of financial or other records; verifying statistical reports for accuracy and completeness; and handling and adjusting complaints. May also direct lower level clerks.

Positions above level IV are *excluded*. Such positions (which may include supervisory responsibility over lower level clerks) require workers to use a thorough knowledge of an office's work and routine to: 1) choose among widely varying methods and procedures to process complex transactions; and 2) select or devise steps necessary to complete assignments. Typical jobs covered by this exclusion include administrative assistants, clerical supervisors, and office managers.

CLERK, ORDER

(4664: Order clerk)

Receives written or verbal customers' purchase orders for material or merchandise from customers or sales people. Work typically involves some combination of the following duties: quoting prices; determining availability of ordered items and suggesting substitutes when necessary; advising expected delivery date and method of delivery; recording order and customer information on order sheets; checking order sheets for accuracy and adequacy of information recorded; ascertaining credit rating of customer; furnishing customer with acknowledgment of receipt of order; following up to see that order is delivered by the specified date or to let customer know of a delay in delivery; maintaining order file; checking shipping invoice against original order. *Exclude workers paid on a commission basis or whose duties include any of the following:* receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

Positions are classified into levels according to the following definitions:

Clerk, Order I

Handles orders involving items which have readily identified uses and applications. May refer to a catalog, manufacturer's manual, or similar document to insure that proper item is supplied or to verify price of ordered item.

Clerk, Order II

Handles orders that involve making judgments such as choosing which specific product or material from the establishment's product lines will satisfy the customer's needs, or determining the price to be quoted when pricing involves more than merely referring to a price list or making some simple mathematical calculations.

KEY ENTRY OPERATOR

(4793: Data entry keyer)

Operates keyboard-controlled data entry device such as keypunch machine or key-operated magnetic tape or disc encoder to transcribe data into a form suitable for computer processing. Work requires skill in operating an alphanumeric keyboard and an understanding of transcribing procedures and relevant data entry equipment.

Positions are classified into levels on the basis of the following definitions:

Key Entry Operator I

Work is routine and repetitive. Under close supervision or following specific procedures or detailed instructions, works from various standardized source documents which have been coded and require little or no selecting, coding, or interpreting of data to be entered. Refers to supervisor problems arising from erroneous items, codes, or missing information.

Key Entry Operator II

Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be entered from a variety of source documents. On occasion may also perform routine work as described for level I.

Note: *Excluded* are operators above level II using the key entry controls to access, read, and evaluate the substance of specific records to take substantive actions, or to make entries requiring a similar level of knowledge.

PERSONNEL ASSISTANT (Employment)

(4692: Personnel clerk, except payroll and timekeeper)

Personnel assistants (employment) provide clerical and technical support to personnel professionals or managers in internal matters relating to recruiting, hiring, transfer, change in pay status, and termination of employees. At the lower levels, assistants primarily provide basic information to current and prospective employees, maintain personnel records and information listings, and prepare and process papers on personnel actions (hires, transfers, changes in pay, etc.). At the higher levels, assistants may perform limited aspects of a personnel professional's work, e.g., interviewing candidates, recommending placements, and preparing personnel reports. Final decisions on personnel actions are made by personnel professionals or managers. Some assistants may

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available openings for clear cut reasons, referring others to appropriate employment interviewer. Guidance is provided on possible sources of information, methods of work, and types of reports needed. Completed written work receives close technical review from higher level personnel office employees; other work may be checked occasionally.

Personnel Assistant (Employment) IV

Performs work in support of personnel professionals which requires a good working knowledge of personnel procedures, guides, and precedents. In representative assignments: interviews applicants, obtains references, and recommends placement of applicants in a few well-defined occupations (trades or clerical) within a stable organization or unit; conducts post-placement or exit interviews to identify job adjustment problems or reasons for leaving the organization; performs routine statistical analyses related to manpower, EEO, hiring, or other employment concerns, e.g., compares one set of data to another set as instructed; and requisitions applicants through employment agencies for clerical or blue-collar jobs. At this level, assistants typically have a range of personal contacts within and outside the organization and with applicants, and must be tactful and articulate. May perform some clerical work in addition to the above duties. Supervisor reviews completed work against stated objectives.

SECRETARY

(4622: Secretary)

Provides principal secretarial support in an office, usually to one individual, and, in some cases, also to the subordinate staff of that individual. Maintains a close and highly responsive relationship to the day-to-day activities of the supervisor and staff. Works fairly independently receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties requiring a knowledge of office routine and an understanding of the organization, programs, and procedures related to the work of the office.

Exclusions. Not all positions titled "secretary" possess the above characteristics. Examples of positions which are excluded from the definition are as follows:

a. Clerks or secretaries working under the direction of secretaries or administrative assistants as described in e;

b. Stenographers not fully performing secretarial duties;

c. Stenographers or secretaries assigned to two or more professional, technical, or managerial persons of equivalent rank;

d. Assistants or secretaries performing any kind of technical work, e.g., personnel, accounting, or legal work;

e. Administrative assistants or supervisors performing duties which are more difficult or more responsible than the secretarial work described in LR-1 through LR-4;

f. Secretaries receiving additional pay primarily for maintaining confidentiality of payroll records or other sensitive information;

g. Secretaries performing routine receptionist, typing, and filing duties following detailed instructions and guidelines; these duties are less responsible than those described in LR-1 below; and

h. Trainees.

Classification by level

Secretary jobs which meet the required characteristics are matched at one of five levels according to two factors: (a) level of the secretary's supervisor within the overall organizational structure, and (b) level of the secretary's responsibility. The table following the explanations of these factors indicates the level of the secretary for each combination of factors.

Level of secretary's supervisor (LS)

Secretaries should be matched at one of the three LS levels below best describing the organization of the secretary's supervisor.

LS-1 Organizational structure is not complex and internal procedures and administrative controls are simple and informal; supervisor directs staff through face-to-face meetings.

LS-2 Organizational structure is complex and is divided into *subordinate groups that usually differ from each other as to subject-matter, function, etc.*; supervisor usually directs staff through intermediate supervisors; and internal procedures and administrative controls are formal. An entire organization (e.g., division, subsidiary, or parent organization) may contain a variety of subordinate groups which meet the LS-2 definition. Therefore, it is not unusual for one LS-2 supervisor to report to another LS-2 supervisor.

The presence of subordinate supervisors does not by itself mean LS-2 applies, e.g., a clerical processing organization divided into several units, each performing very similar work is placed in LS-1.

In smaller organizations or industries such as retail trade, with relatively few organizational levels, the supervisor may have an impact on the policies and major programs of the entire organization, and may deal with important outside contacts, as described in LS-3.

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LS-3 Organizational structure is divided into two or more subordinate supervisory levels (of which at least one is a managerial level) with several subdivisions at each level. Executive's program(s) are usually inter-locked on a direct and continuing basis with other major organizational segments, requiring constant attention to extensive formal coordination, clearances, and procedural controls. Executive typically has: financial decision making authority for assigned program(s); considerable impact on the entire organization's financial position or public image; and responsibility for, or has staff specialists in, such areas as personnel and administration for assigned organization. Executive plays an important role in determining the policies and major programs of the entire organization, and spends considerable time dealing with outside parties actively interested in assigned program(s) and current or controversial issues.

Level of secretary's responsibility (LR)

This factor evaluates the nature of the work relationship between the secretary and the supervisor or staff, and the extent to which the secretary is expected to exercise initiative and judgment. Secretaries should be matched at the level best describing their level of responsibility. When the position's duties span more than one LR level, the introductory paragraph at the beginning of each LR level should be used to determine which of the levels best matches the position. (Typically, secretaries performing at the higher levels of responsibility also perform duties described at the lower levels.)

LR-1 Carries out *recurring* office procedures independently. Selects the guideline or reference which fits the specific case. Supervisor provides specific instructions on new assignments and checks completed work for accuracy. Performs varied duties including or comparable to the following:

a. Responds to routine telephone requests which have standard answers; refers calls and visitors to appropriate staff. Controls mail and assures timely staff response; may send form letters.

b. As instructed, maintains supervisor's calendar, makes appointments, and arranges for meeting rooms.

c. Reviews materials prepared for supervisor's approval for typographical accuracy and proper format.

d. Maintains recurring internal reports, such as: time and leave records, office equipment listings, correspondence controls, training plans, etc.

e. Requisitions supplies, printing, maintenance, or other services. Types, takes and transcribes dictation, and establishes and maintains office files.

LR-2 Handles differing situations, problems, and deviations in the work of the office according to the supervisor's general instructions, priorities, duties, policies, and program goals. Supervisor may assist secretary with special assignments. Duties include or are comparable to the following:

a. Screens telephone calls, visitors, and incoming correspondence; personally responds to requests for information concerning office procedures; determines which requests should be handled by the supervisor, appropriate staff member, or other offices. May prepare and sign routine, non-technical correspondence in own or supervisor's name.

b. Schedules tentative appointments without prior clearance. Makes arrangements for conferences and meetings and assembles established background materials, as directed. May attend meetings and record and report on the proceedings.

c. Reviews outgoing materials and correspondence for internal consistency and conformance with supervisor's procedures; assures that proper clearances have been obtained, when needed.

d. Collects information from the files or staff for routine inquires on office program(s) or periodic reports. Refers nonroutine requests to supervisor or staff.

e. Explains to subordinate staff supervisor's requirements concerning office procedures. Coordinates personnel and administrative forms for the office and forwards for processing.

LR-3 Uses greater judgment and initiative to determine the approach or action to take in nonroutine situations. Interprets and adapts guidelines, including unwritten policies, precedents, and practices, which are not always completely applicable to changing situations. Duties include or are comparable to the following:

a. Based on a knowledge of the supervisor's views, composes correspondence on own initiative about administrative matters and general office policies for supervisor's approval.

b. Anticipates and prepares materials needed by the supervisor for conferences, correspondence, appointments, meetings, telephone calls, etc., and informs supervisor on matters to be considered.

c. Reads publications, regulations, and directives and takes action or refers those that are important to the supervisor and staff.

d. Prepares special or one-time reports, summaries, or replies to inquires, selecting relevant information from a variety of sources such as reports, documents, correspondence, other offices, etc., under general direction.

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e. Advises secretaries in subordinate offices on new procedures; requests information needed from the subordinate office(s) for periodic or special conferences, reports, inquires, etc. Shifts clerical staff to accommodate work load needs.

LR-4 Handles a wide variety of situations and conflicts involving the clerical or administrative functions of the office which often cannot be brought to the attention of the executive. The executive sets the overall objectives of the work. Secretary may participate in developing the work deadlines. Duties include or are comparable to the following:

a. Composes correspondence requiring some understanding of technical matters; may sign for executive when technical or policy content has been authorized.

b. Notes commitments made by executive during meetings and arranges for staff implementation. On own initiative, arranges for staff member to represent organization at conferences and meetings, establishes appointment priorities, or reschedules or refuses appointments or invitations.

c. Reads outgoing correspondence for executive's approval and alerts writers to any conflict with the file or departure from policies or executive's viewpoints; gives advice to resolve the problems.

d. Summarizes the content of incoming materials, specially gathered information, or meetings to assist executive; coordinates the new information with background office sources; draws attention to important parts or conflicts.

e. In the executive's absence, ensures that requests for action or information are relayed to the appropriate staff member; as needed, interprets request and helps implement action; makes sure that information is furnished in timely manner; decides whether executive should be notified of important or emergency matters.

Exclude secretaries performing any of the following duties:

a. Acts as office manager for the executive's organization, e.g., determines when new procedures are needed for changing situations and devises and implements alternatives; revises or clarifies procedures to eliminate conflict or duplication; identifies and resolves various problems that affect the orderly flow of work in transactions with parties outside the organization.

b. Prepares agenda for conferences; explains discussion topics to participants; drafts introductions and develops background information and prepares outlines for executive or staff member(s) to use in writing speeches.

c. Advises individuals outside the organization on the executive's views on major policies or current issues facing the organization; contacts or responds to contacts from high-ranking outside officials (e.g., city or State officials, Member of Congress, presidents of national unions or large national or international firms, etc.) in unique situations. These officials may be relatively inaccessible, and each contact typically must be handled differently, using judgment and discretion.

Criteria for matching secretaries by level

Level of secretary's supervisor	Level of secretary's responsibility			
	LR-1	LR-2	LR-3	LR-4
LS-1	I*	II	III	IV
LS-2	I*	III	IV	V
LS-3	I*	IV	V	V

*Regardless of LS level.

SWITCHBOARD OPERATOR-RECEPTIONIST

(4645: Receptionist)

Operates a single-position telephone switchboard or console, used with a private branch exchange (PBX) system to relay incoming, outgoing, and intrasystem calls *and* acts as a receptionist greeting visitors, determining nature of visits and directing visitors to appropriate persons. Work may also involve other duties such as recording and transmitting messages; keeping records of calls placed; providing information to callers and visitors; making appointments; keeping a log of visitors; and issuing visitor passes. May also type and perform other routine clerical work, usually while at the switchboard or console, which may occupy the major portion of the worker's time.

WORD PROCESSOR

(4624: Typist)

Uses automated systems, such as word processing equipment, or personal computers or work stations linked to a larger computer or local area network, to produce a variety of

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UTMB Occupation Definitions

Administrative Occupations

ACCOUNTANT
Entry-level position which examines, analyzes, and balances financial documents and records. Accumulates and tabulates data for reports of appropriations, expenditures, and the cost of maintenance and operations. Assists in supervising clerical or bookkeeping support staff. Bachelor's Degree in Accounting.

ADMINISTRATIVE ASSISTANT
Responsible for fiscal and budgetary matters such as monitoring line-item spending and billing. Supervises clerical staff and reviews day-to-day operations of business office. Interviews applicants and makes recommendation on a variety of personnel matters such as performance reviews and disciplinary problems. Bachelor's Degree and considerable experience in office management or business administration.

MEDICAL RECORD ADMINISTRATOR
(Not departmental manager)
Develops, manages, and evaluates health information services in accordance with medical, administrative, and legal requirements. Supervises the acquisition of complete medical records on each patient. Analyzes medical records and maintains quality assurance. Bachelor's Degree from an approved School for Medical Record Administration and registration with the American Medical Record Administration.

PATIENT ACCOUNT REPRESENTATIVE
Contacts patients, patients' representatives, and insurance companies regarding unpaid balances of medical bills. Reviews delinquent accounts in order to detect billing errors or errors in third party reimbursement responsibilities and informs patients. Makes arrangements for collecting unpaid balances and may refer account to collection agency. High school degree supplemented with bookkeeping and patient account experience.

HUMAN RESOURCES SPECIALIST
(Personnel Specialist)
Entry-level position which provides professional administrative assistance in recruitment, compensation, benefits, employee relations or training. May work as a specialist in one of these areas or as a generalist with a combination of these duties. Bachelor's Degree in Industrial Relations, Human Resources or a related Social Science field.

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Technicians and Technologists

CYTOTECHNOLOGIST

Accurately screens routine Gyn and Non-Gyn slides for the presence of abnormal cells. Performs fine needle aspirations including preparing and screening of the specimens. Prepares and stains slides when required. Bachelor's degree and registered by the American Society of Clinical Pathologists (ASCP).

DIALYSIS TECHNICIAN

Sets up and operates artificial kidney machine to provide dialysis treatment for patients with kidney disorders or failures. Monitors patients for adverse reactions and monitors kidney machine for malfunction. Trains kidney patients in the home use of dialysis equipment. High school graduation and a minimum of one year's training.

ELECTROCARDIOGRAPH TECHNICIAN

Responsible for routine administration of electrocardiograph tests. Prepares patients for examination, operates equipment, and develops photographic tracings. Works under the direct supervision of the Chief EKG Technician. High school graduation.

ELECTROENCEPHALOGRAPH TECHNICIAN

Performs clinical electroencephalographic examinations to obtain data for use in diagnosis of brain disorders. Responsible for preparing patient for examination; operating of equipment; observing patient during examination; and analyzing finished records for possible false readings. High school graduation supplemented by the completion of an approved training course in electroencephalography.

NUCLEAR MEDICINE TECHNOLOGISTS

Prepares radiopharmaceuticals. Calculates and administers dosages. Explains therapeutic procedures of function tests and radioassay tests to patients. Calibrates, operates, and tests instruments for patient evaluations. Associate's Degree in Nuclear Medicine Technology and registration by the American Registry of Radiologic Technologists (ARRT).

OPHTHALMIC TECHNOLOGIST

Assists the ophthalmologist in the diagnosis and treatment of diseases and injuries of the eye. Conducts preliminary eye examinations including visual acuity testing, pupil examinations, muscle balance work-ups and refractometry. Performs various diagnostic testing procedures to determine vision loss and ocular disorders. Two years of college and successful completion of a two year accredited medical assistant program resulting in certification as an Ophthalmic Technologist.

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RADIATION THERAPY TECHNOLOGIST
Prepares patient for radiotherapy treatment. Assists physicist in isodose curve preparation and administers radiotherapy treatment to patient. Consults with physician concerning treatment, and maintains daily records and details of treatment. Observes progress of patient through follow-up treatment program. Graduation from an approved School of Radiation Therapy and registration with the American Registry of Radiologic Technologists (ARRT).

RADIOLOGIC TECHNOLOGIST
Provides technical knowledge and skills necessary to perform radiographic procedures. Operates equipment, positions and instructs patients during examinations. Assists radiologist with contrast media and performance of fluoroscopic procedures. Formal training in Radiologic Technology and eligibility for registration by the American Registry of Radiologic Technologists (ARRT).

SURGICAL TECHNOLOGIST
(Operating Room Technician)
Assists in preparing operating room for a variety of surgical procedures. Gloves and gowns surgical team, and assists the surgeon in draping patient. Provides assistance to surgical team when requested. Receives direct supervision from a professional Registered Nurse. High school graduation, with formal or extensive on-the-job training in operating room procedures resulting in CORT certification.

ULTRASOUND TECHNOLOGIST
Performs routine ultrasonic procedures in accordance with established methods. Prepares and positions patient and explains scanning process. Adjusts equipment controls according to specific orders and examination procedures. Labels and assembles scans for professional diagnosis and maintenance of records. Graduation from an approved program of Radiology registered with the American Registry of Radiologic Technologists (ARRT) and certified as an Ultrasonographer.

RESEARCH ASSISTANT
(Laboratory Technician)
Under close supervision, follows procedures and guidelines to execute research projects. Sets up apparatus and performs basic experiments. Records and evaluates test results. Bachelor's Degree with major course work in a scientific discipline.

MEDICAL TECHNOLOGIST
Entry-level position which performs both routine and special medical laboratory tests. Performs routine instrument checks and maintenance. Prepares reagents or indicator solutions. Prepares and interprets slides for microscopic analysis. Records and statistically evaluates quality control tests. Bachelor's Degree and registered by the American Society for Clinical Pathologists (ASCP).

Reprinted from the 1994 National Survey of Hospital and Medical School Salaries, University of Texas Medical Branch, Galveston, Texas, October 1994.

MEDICAL LABORATORY TECHNICIAN
Provides technical assistance by conducting routine tests in clinical pathology. Prepares reagents and solutions, prepares specimens for analysis, conduct tests, and reports findings. Procedures used are standardized. Associate's Degree and registered as a Medical Laboratory Technician by the American Society for Clinical Pathologists (ASCP).

HISTOLOGY TECHNICIAN
Entry-level position which prepares tissues specimens for examination by pathologists. Fixes dehydrates, and cuts tissue. Prepares stains and sets up slides for microscopic examination. Prepares specimens by frozen section techniques and makes serial sections. High school degree and one year of training in histology techniques. Registered by the American Society of Clinical Pathologists (ASCP).

Nurses

LICENSED VOCATIONAL NURSE
Administers routine patient cares such as medications and/or treatments, as prescribed by a physician, under the supervision of a Registered Nurse. Responsible for safety, comfort, care, and treatment of patients. Graduation from an approved vocational program and state licensure.

STAFF NURSE, R.N.
Administers medications and treatments as prescribed by a physician. Prepares nursing care plan. Observes and documents symptoms and behaviors of patients. Directs and assists supportive nursing personnel. Graduation from an approved nursing program and state licensure.

HEAD NURSE
Supervises planning, implementation, and evaluation of nursing services in patient care area. Directs, supervises, and assists Staff Nurses, Vocational Nurses, and other nursing support personnel who perform nursing and patient care duties. Graduation from an approved Nursing program and state licensure. Minimum of three years in patient care.

PROFESSIONAL NURSE PRACTITIONER
Collects developmental history of patient. Conducts basic physical assessments by observations, inspections, palpations, etc. Discriminates between normal conditions and normal and abnormal deviations by specific screening tests and refers patients with abnormal findings to physicians. Administers medications and treatments as prescribed. Master's Degree in nursing and state licensure. Two years of clinical nursing experience.

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NURSE ANESTHETIST
Administers to patients standard types of anesthetic agents such as inhalation, intravenous, and rectal anesthesia under the supervision of surgeon and anesthesiologist. Graduation from an approved nursing program and state licensure. Certification as a Registered Nurse Anesthetist (CRNA).

CLINICAL NURSE SPECIALIST
Responsible for assessing, developing, and revising nursing care delivery systems. Develops, executes, and evaluates clinical research. Plans and conducts educational programs necessary to improve technical and professional competence among the nursing staff. Performs consultation services as requested within nursing services. Master's Degree in nursing and state licensure. Minimum of two years clinical nursing experience.

Therapists

OCCUPATIONAL THERAPIST
Implements self-care programs and works to assist in treatment an rehabilitation of mentally ill or physically disabled patients. Selects constructive activities suited to individual's physical capabilities, intelligence level and interest. Bachelor's Degree from an approved School of Occupational Therapy, eligible for state licensure an certified by the American Occupational Therapy Certification Board.

PHYSICAL THERAPIST
Plans and implements physical therapeutic treatments such as exercise, massage, heat, water, light, and electricity as prescribed by a physician. Observes the responses of patients and modifies the treatment to achieve desired results. Bachelor's Degree from an approved School of Physical Therapy, certification by the American Physical Therapy Association, and current state licensure.

RESPIRATORY THERAPIST
Administers pulmonary care procedures such as hyperinflation therapy, tracheal suctioning, chest therapy, (hyper) humidity therapy and cough therapy. Monitors patient legal breathing parameters. Tests and maintains equipment. Graduation from an approved program of Respiratory Therapy and registered by the National Board for Respiratory Care as a Registered Respiratory Therapist (NRBC).

Other

AUDIOLOGIST
Administers audiometric tests designed to determine patient's hearing range, degree, site, and nature of damage to auditory system. Differentiates between organic and inorganic hearing disabilities. Plans and participates in rehabilitive programs. Master's Degree with Certificate of Clinical Competency in Audiology from the American Speech-Language and Hearing Association.

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CLINICAL PERFUSIONIST
Operates heart lung machine for total bypass and/or coronary perfusion/recirculation to take over patient's vital functions during open-heart surgery. Operates life support systems during surgery and post-operative recovery. Bachelor's Degree in biology, chemistry or physiology and experience in perfusion procedures. Certification in cardiovascular perfusion.

DOSIMETRIST
Acquires patient anatomical contour information and measures individual parameters at the tumor location. Calculates radiation dosage and assists in preparing a comprehensive radiation therapy treatment program. Bachelor's Degree in medical physics, physics, math or related field. Two years related experience.

NURSE AIDE
Under close supervision and according to established procedures, performs routine services and duties necessary to provide care, comfort, and safety of patients. Takes vital signs, assists patients with personal hygiene, and feeds and ambulates patients according to specific instructions. Maintains patient and room in a clean and orderly condition. High School Degree.

PHLEBOTOMIST
Draws blood samples from patients. Identifies patient according to hospital protocol prior to specimen collection. Protects samples for analysis in the laboratory. Notes information on collection records. Keeps blood trays and equipment clean. High school graduation and certified as a Medical Laboratory Technician.

PHYSICIAN'S ASSISTANT
Responsible for diagnostic and therapeutic management of patients by completing medical histories, conducting physicals, establishing diagnoses through tests, and formulating treatment plans. Provides follow-up and health maintenance care to patients in accordance with protocols established by physician. Bachelor's Degree from an approved Physician Assistant program, certification as a Physician's Assistant.

SPEECH PATHOLOGIST
Administers routine and complex tests on speech- and language-impaired patients. Diagnoses and evaluates speech and language competencies. Treats functional and organic disorders. Master's Degree in Speech Pathology and certification by the American Speech-Language and Hearing Association and licensed in Speech Pathology and Audiology.

Reprinted from the 1994 National Survey of Hospital and Medical School Salaries, University of Texas Medical Branch, Galveston, Texas, October 1994.

SURGEON'S ASSISTANT

Assists surgeon in operating room during Cardiovascular procedures. Harvests saphenous vein and prepares for Coronary Surgery. Makes and closes incisions. Evaluates patients in the hospital and on an out-patient basis. Communicates medical care guidelines to patient. Bachelor's degree from an approved Physician's Assistant program and PA certification with a specialty in Surgery.

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Average Wages for Health Care Workers

Occupation	Source	Year	Hourly Wage	Multiplier	Hourly Wage, 95$	Estimated Total Compens., 95$	Wages per Minute, 95$	Total Comp. per min./95$
Administrative								
Accountants	UTMB	1994	$13.98	1.0239234	$14.32	$19.56	$0.239	$0.326
Administrative assistants	UTMB	1994	$13.30	1.0239234	$13.62	$18.60	$0.227	$0.310
Administrative support, nec	CPS	1993	$10.65	1.0473083	$11.15	$15.24	$0.186	$0.254
Billing clerks	CPS	1993	$8.88	1.0473083	$9.30	$12.70	$0.155	$0.212
General office clerks	CPS	1993	$8.58	1.0473083	$8.99	$12.27	$0.150	$0.205
General office clerks, level I (health srv)	BLS-ocs	1994	$6.46	1.0239234	$6.61	$9.04	$0.110	$0.151
General office clerks, level II (health srv)	BLS-ocs	1994	$8.31	1.0239234	$8.51	$11.62	$0.142	$0.194
General office clerks, level III (health srv)	BLS-ocs	1994	$9.74	1.0239234	$9.97	$13.62	$0.166	$0.227
General office clerks, level IV (health srv)	BLS-ocs	1994	$10.86	1.0239234	$11.12	$15.19	$0.185	$0.253
Human resources specialists	UTMB	1994	$14.38	1.0239234	$14.73	$20.12	$0.245	$0.335
Managers, medicine and health	CPS	1993	$16.44	1.0473083	$17.22	$23.52	$0.287	$0.392
Medical record administrators	UTMB	1994	$16.84	1.0239234	$17.24	$23.55	$0.287	$0.392
Patient account representatives(2)	UTMB	1994	$9.95	1.0239234	$10.18	$13.91	$0.170	$0.232
Receptionists (health services)	BLS-ocs	1994	$7.83	1.0239234	$8.02	$10.95	$0.134	$0.183
Receptionists	CPS	1993	$8.51	1.0473083	$8.91	$12.17	$0.149	$0.203
Secretaries (health services), level I	BLS-ocs	1994	$9.22	1.0239234	$9.44	$12.90	$0.157	$0.215
Secretaries (health services), level II	BLS-ocs	1994	$11.75	1.0239234	$12.03	$16.43	$0.201	$0.274
Secretaries (health services), level III	BLS-ocs	1994	$12.99	1.0239234	$13.30	$18.17	$0.222	$0.303
Secretaries (health services), level IV	BLS-ocs	1994	$15.72	1.0239234	$16.10	$21.99	$0.268	$0.366
Secretaries (health services), level V	BLS-ocs	1994	$18.59	1.0239234	$19.03	$26.00	$0.317	$0.433
Secretaries	CPS	1993	$9.54	1.0473083	$9.99	$13.65	$0.167	$0.227
Supervisor, general office	CPS	1993	$10.70	1.0473083	$11.21	$15.31	$0.187	$0.255

Occupation	Source	Year	Hourly Wage	Multiplier	Hourly Wage, 95$	Estimated Total Compens., 95$	Wages per Minute, 95$	Total Comp. per min./95$
Technicians and Technologists								
Cert. Ophthalmic Medical Technologist(3)	other	1994	$12.34	1.0239234	$12.64	$17.26	$0.211	$0.288
Cert. Ophthalmic Tech (3)	other	1994	$10.99	1.0239234	$11.25	$15.37	$0.188	$0.256
Cytotechnologists	UTMB	1994	$17.83	1.0239234	$18.25	$24.94	$0.304	$0.416
Dialysis technicians	UTMB	1994	$10.52	1.0239234	$10.77	$14.71	$0.180	$0.245
Electrocardiograph technicians	UTMB	1994	$8.73	1.0239234	$8.94	$12.21	$0.149	$0.204
Electroencephalograph technicians	UTMB	1994	$12.16	1.0239234	$12.45	$17.00	$0.207	$0.283
Electron Microscopy Tech	UTMB	1994	$13.37	1.0239234	$13.69	$18.70	$0.228	$0.312
Health technologists and technicians, nec	CPS	1993	$10.11	1.0473083	$10.59	$14.46	$0.176	$0.241
Histology Technician	UTMB	1994	$13.12	1.0239234	$13.43	$18.35	$0.224	$0.306
Medical Lab Technician	UTMB	1994	$12.36	1.0239234	$12.66	$17.29	$0.211	$0.288
Medical Technologist	UTMB	1994	$16.35	1.0239234	$16.74	$22.87	$0.279	$0.381
Nuclear medicine technologists	UTMB	1994	$16.84	1.0239234	$17.24	$23.56	$0.287	$0.393
Ophthalmic tech (non-certified) (3)	other	1994	$9.92	1.0239234	$10.16	$13.87	$0.169	$0.231
Ophthalmic technologists	UTMB	1994	$13.29	1.0239234	$13.61	$18.59	$0.227	$0.310
Radiation therapy technologists	UTMB	1994	$17.32	1.0239234	$17.73	$24.22	$0.296	$0.404
Radiologic technician	CPS	1993	$14.44	1.0473083	$15.12	$20.66	$0.252	$0.344
Radiologic technologists	UTMB	1994	$13.70	1.0239234	$14.03	$19.16	$0.234	$0.319
Research Asst (Lab Technician)	UTMB	1994	$11.10	1.0239234	$11.37	$15.53	$0.189	$0.259
Surgical technologists (1)	UTMB	1994	$11.22	1.0239234	$11.49	$15.69	$0.191	$0.261
Technicians, medical machines, level I	BLS-wcp	1989	$7.97	1.2405797	$9.89	$13.51	$0.165	$0.225
Technicians, medical machines, level II	BLS-wcp	1989	$10.31	1.2405797	$12.79	$17.47	$0.213	$0.291
Technicians, medical machines, level III	BLS-wcp	1989	$12.41	1.2405797	$15.40	$21.03	$0.257	$0.350
Technicians, medical machines, level IV	BLS-wcp	1989	$15.29	1.2405797	$18.97	$25.91	$0.316	$0.432
Ultrasound technologists	UTMB	1994	$16.67	1.0239234	$17.07	$23.32	$0.284	$0.389

Average Wages for Health Care Workers

Occupation	Source	Year	Hourly Wage	Multiplier	Hourly Wage, 95$	Estimated Total Compens., 95$	Wages per Minute, 95$	Total Comp. per min./95$
LPNs and RNs								
Licensed practical nurses	UTMB	1994	$11.50	1.0239234	$11.77	$16.08	$0.196	$0.268
Licensed practical nurses	CPS	1993	$10.97	1.0473083	$11.49	$15.69	$0.191	$0.262
Licensed practical nurses, level I	BLS-ocs	1994	$9.97	1.0239234	$10.21	$13.94	$0.170	$0.232
Licensed practical nurses, level II	BLS-ocs	1994	$11.47	1.0239234	$11.74	$16.04	$0.196	$0.267
Licensed practical nurses, level III	BLS-ocs	1994	$13.29	1.0239234	$13.61	$18.59	$0.227	$0.310
Nurse practitioners	UTMB	1994	$23.70	1.0239234	$24.27	$33.15	$0.404	$0.553
Registered nurses	CPS	1993	$17.20	1.0473083	$18.01	$24.61	$0.300	$0.410
Registered nurses, clinical specialist	UTMB	1994	$23.10	1.0239234	$23.66	$32.32	$0.394	$0.539
Registered nurses, CRNA	UTMB	1994	$34.33	1.0239234	$35.15	$48.02	$0.586	$0.800
Registered nurses, head	UTMB	1994	$24.19	1.0239234	$24.76	$33.83	$0.413	$0.564
Registered nurses, level I	BLS-ocs	1994	$14.91	1.0239234	$15.27	$20.85	$0.254	$0.348
Registered nurses, level II	BLS-ocs	1994	$18.09	1.0239234	$18.52	$25.30	$0.309	$0.422
Registered nurses, level II specialists	BLS-ocs	1994	$19.49	1.0239234	$19.96	$27.26	$0.333	$0.454
Registered nurses, level III	BLS-ocs	1994	$24.59	1.0239234	$25.18	$34.39	$0.420	$0.573
Registered nurses, level III, CRNA	BLS-ocs	1994	$36.78	1.0239234	$37.66	$51.44	$0.628	$0.857
Registered nurses, level IV	BLS-ocs	1994	$24.61	1.0239234	$25.20	$34.42	$0.420	$0.574
Registered nurses, staff	UTMB	1994	$18.24	1.0239234	$18.68	$25.52	$0.311	$0.425
Therapists								
Inhalation therapists	CPS	1993	$14.32	1.0473083	$15.00	$20.49	$0.250	$0.341
Occupational therapists	CPS	1993	$17.24	1.0473083	$18.06	$24.66	$0.301	$0.411
Occupational therapists	UTMB	1994	$18.64	1.0239234	$19.09	$26.07	$0.318	$0.435
Physical therapists	UTMB	1994	$19.62	1.0239234	$20.09	$27.44	$0.335	$0.457
Physical therapists	CPS	1993	$18.21	1.0473083	$19.07	$26.05	$0.318	$0.434
Respiratory therapists	UTMB	1994	$15.22	1.0239234	$15.59	$21.29	$0.260	$0.355
Therapists, nec	CPS	1993	$14.35	1.0473083	$15.03	$20.53	$0.250	$0.342
Other								
Audiologists	UTMB	1994	$17.64	1.0239234	$18.06	$24.67	$0.301	$0.411
Certified Retinal Angiographer	other	1994	$13.09	1.0239234	$13.40	$18.31	$0.223	$0.305
Clinical perfusionists	UTMB	1994	$31.02	1.0239234	$31.76	$43.39	$0.529	$0.723
Dental assistant	CPS	1993	$8.85	1.0473083	$9.27	$12.66	$0.154	$0.211
Dietician	UTMB	1994	$15.66	1.0239234	$16.03	$21.90	$0.267	$0.365
Dietician **	CPS	1993	$12.89	1.0473083	$13.50	$18.44	$0.225	$0.307
Dosimetrists	UTMB	1994	$21.46	1.0239234	$21.98	$30.02	$0.366	$0.500
Guard, Level II	BLS-ocs	1994	$11.18	1.0239234	$11.45	$15.64	$0.191	$0.261
Health aides, except nursing	CPS	1993	$7.53	1.0473083	$7.89	$10.77	$0.131	$0.180
Janitors	CPS	1993	$8.09	1.0473083	$8.47	$11.57	$0.141	$0.193
Lab Tech	CPS	1993	$13.51	1.0473083	$14.15	$19.33	$0.236	$0.322
Librarian	UTMB	1994	$16.67	1.0239234	$17.07	$23.32	$0.284	$0.389

Average Wages for Health Care Workers

Occupation	Source	Year	Hourly Wage	Multiplier	Hourly Wage, 95$	Estimated Total Compens., 95$	Wages per Minute, 95$	Total Comp. per min./95$
Nursing aides, orderlies, and attendants	CPS	1993	$7.08	1.0473083	$7.41	$10.13	$0.124	$0.169
Nursing assistants, level I	BLS-ocs	1994	$6.12	1.0239234	$6.27	$8.56	$0.104	$0.143
Nursing assistants, level II	BLS-ocs	1994	$6.93	1.0239234	$7.10	$9.69	$0.118	$0.162
Nursing assistants, level III	BLS-ocs	1994	$8.83	1.0239234	$9.04	$12.35	$0.151	$0.206
Nursing assistants, level IV	BLS-ocs	1994	$11.21	1.0239234	$11.48	$15.68	$0.191	$0.261
Nurse aides	UTMB	1994	$7.69	1.0239234	$7.87	$10.76	$0.131	$0.179
Orthoptist (3)	other	1994	$13.53	1.0239234	$13.85	$18.92	$0.231	$0.315
Pharmacists	CPS	1993	$22.31	1.0473083	$23.37	$31.92	$0.389	$0.532
Phlebotomists	UTMB	1994	$8.74	1.0239234	$8.95	$12.23	$0.149	$0.204
Physician's assistants	UTMB	1994	$23.24	1.0239234	$23.80	$32.51	$0.397	$0.542
Physicist (4)	other	1995	$42.50	1	$42.50	$58.06	$0.708	$0.968
Psychologist (5)	other	1995	$36.06	1	$36.06	$49.26	$0.601	$0.821
Radiologic Technician	CPS	1993	$14.44	1.0473083	$15.12	$20.66	$0.252	$0.344
Social Worker	CPS	1993	$13.81	1.0473083	$14.46	$19.76	$0.241	$0.329
Speech pathologists	UTMB	1994	$17.96	1.0239234	$18.39	$25.13	$0.307	$0.419
Surgeon's assistants (PA w/specialty)	UTMB	1994	$17.67	1.0239234	$18.09	$24.71	$0.302	$0.412

Notes:

BLS-ocs refers to the Occupational Compensation Survey, June 1994, published by the BLS. Bulletin 2479. Level definitions included in Appendix V.A.

BLS-wcp refers to the BLS White-Collar Pay survey of private, service-producing industries, March 1989. See Appendix V.A for occupation definitions.

UTMB refers to the National Survey of Hospital and Medical School Salaries performed by the University of Texas Medical Branch, 1994. Medians also available within the UTMB study. See Appendix V.A for job descriptions.

With the exception of UTMB, all wages represent those for the population of health services staff in any setting. UTMB reflects wages for hospital/medical school staff.

1995 wages obtained by inflating nominal wages by the Employment Cost Index for Wages and Salaries, private service-producing industries. December index used for each year.

Total compensation calculated as hourly wage x benefits multiplier. Benefits multiplier=1.3660 and is estimated from the Employer Costs for Employee Compensation for March 1995, as reported by the BLS.

Multiplier calculated as 1 + the ratio of the total cost of all benefits to the wage rate for all workers in private, health services industries, March 1995.

(1)Also called an operating room technician. High school graduate with on-the-job training.

(2)Also referred to as "billing agent."

(3)Orthoptist, COMT, COT, and non-certified ophthalmic tech wage data obtained from AUPO Administrators Survey, January 1995.

(4)Physicist wage data obtained from the American Association of Physicists in Medicine Survey of Professionals for calendar year 1995. Published Spring 1996.

(5) Psychologist wage based upon the results of Salaries in Psychology, 1995 (dated 2/96), obtained from the American Psychological Association. The wage is derived from an annual salary of $75,000 which represents the median annual salary for a clinical psychologist in an individual, group, or medical/psychological group practice.

Individual Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)	Total Comp. (95$)	Total Comp. Per Min. (95$)
Administrative										
1	1086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
2	2086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
3	3086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
4	4086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
6	6086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
7	7086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
8	8086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
9	9086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
10	10086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
11	11086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
12	12086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
13	13086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
14	14086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
15	15086	Insurance Billing Staff	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
1	1088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
2	2088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
3	3088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
4	4088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
6	6088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
7	7088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
8	8088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
9	9088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
10	10088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
11	11088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
12	12088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
13	13088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
14	14088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
15	15088	Medical Secretary	Secretary, II	12.03			Secretary	9.99	16.43	0.274
1	1091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
2	2091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
3	3091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
4	4091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
6	6091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
8	8091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
9	9091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
10	10091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
12	12091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
13	13091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
14	14091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
15	15091	Receptionist	Receptionist	8.02			Receptionist	8.91	10.96	0.183
2	2090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
6	6090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
9	9090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
10	10090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386

Individual Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)	Total Comp. (95$)	Total Comp. Per Min. (95$)
12	12090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
13	13090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
14	14090	Practice Administrator					Mgr, Medicine & Health	16.94	23.14	0.386
2	2092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
4	4092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
6	6092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
8	8092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
9	9092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
10	10092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
12	12092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
13	13092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
15	15092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
3	3081	Clerk	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
3	3094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
4	4081	Clerk	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
4	4087	Medical Records	General Clerk, IV	11.12	Med. Rec. Administrator	17.24			15.19	0.253
4	4094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
8	8083	Coder	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
8	8094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
9	9085	Front Office Staff	Receptionist	8.02			General Office Clerk	8.99	10.96	0.183
9	9087	Medical Records	General Clerk, IV	11.12	Med. Rec. Administrator	17.24			15.19	0.253
9	9094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
10	10086	Billing Clerk	General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30	13.62	0.227
12	12089	Office Manager					Mgr, Medicine & Health	16.94	23.14	0.386
13	13083	Coder	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
13	13087	Medical Records	General Clerk, IV	11.12	Med. Rec. Administrator	17.24			15.19	0.253
13	13081	Clerk	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
13	13093	Secretary (General)	Secretary, II	12.03			Secretary	9.99	16.43	0.274
13	13094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
14	14082	Client Service	General Office Clerk, III	9.97			General Office Clerk	8.99	13.62	0.227
14	14084	Courier	General Office Clerk, I	6.61					9.03	0.150
14	14081	Clerk	General Office Clerk, II	8.51			General Office Clerk	8.99	11.62	0.194
14	14094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
15	15092	Scheduling Secretary	Secretary, I	9.44			Secretary	9.99	12.90	0.215
15	15094	Transcriptionist	Secretary, II	12.03			Secretary	9.99	16.43	0.274
Technicians and Technologists										
2	2041	X-Ray Technician			Radiologic Technologist	14.03	Radiologic Technician	15.12	19.16	0.319
4	4039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
6	6039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
10	10039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
12	12039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
13	13039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
14	14039	Technician	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
1	1017	Histotech			Histology Technician	13.43			18.35	0.306
4	4018	Lab Tech			Medical Lab Technician	12.66			17.29	0.288

Individual Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)	Total Comp. (95$)	Total Comp. Per Min. (95$)
4	4036	Ultrasound Tech	Med. Mach. Oper. Technician, I	9.89	Ultrasound Technologist	17.07	Hlth Technol/Technic, NE	10.59	23.32	0.389
5	5007	Certified Retinal Angio**					Hlth Technol/Technic, NE		18.31	0.305
6	6002	Angio Technician	Med. Mach. Oper. Technician, III	15.40			Hlth Technol/Technic, NE	10.59	21.04	0.351
6	6006	CAT Scan Technician	Med. Mach. Oper. Technician, I	9.89	Radiologic Technologist	14.03	Hlth Technol/Technic, NE	10.59	19.16	0.319
6	6021	MRI Technician			Radiologic Technologist	14.03	Radiologic Technician	15.12	19.16	0.319
6	6023	Nuclear Medicine Technician			Nuclear Med. Technologist	17.24			23.55	0.392
6	6030	Radiation Tech			Radiologic Technologist	14.03	Radiologic Technician	15.12	19.16	0.319
6	6031	Radiation Technical Therapist			Radiation Ther. Technologi	17.73			24.22	0.404
6	6036	Sonographer	Med. Mach. Oper. Technician, I	9.89	Ultrasound Technologist	17.07	Hlth Technol/Technic, NE	10.59	23.32	0.389
6	6040	Vascular Tech	Med. Mach. Oper. Technician, III	15.40	EKG Technician	8.94	Hlth Technol/Technic, NE	10.59	21.04	0.351
6	6041	X-Ray Technician			Radiologic Technologist	14.03	Radiologic Technician	15.12	19.16	0.319
9	9009	CST			Surgical Technologist	11.49			15.70	0.262
10	10012	EEG Technician	Med. Mach. Oper. Technician, II	12.79	EEG Technician	12.45	Hlth Technol/Technic, NE	10.59	17.01	0.283
13	13005	Cardiovascular Tech	Med. Mach. Oper. Technician, III	15.40	EKG Technician	8.94	Hlth Technol/Technic, NE	10.59	21.04	0.351
13	13004	Cardiac Sonographer			Ultrasound Technologist	17.07			23.32	0.389
13	13013	EKG Technician	Med. Mach. Oper. Technician, I	9.89	EKG Technician	8.94	Hlth Technol/Technic, NE	10.59	12.21	0.204
13	13022	Nuclear Cardiology Technician			Nuclear Med. Technologist	17.24			23.55	0.392
14	14001	Anesthesia Technician	Med. Mach. Oper. Technician, I	9.89			Hlth Technol/Technic, NE	10.59	13.51	0.225
14	14010	Cytotechnologist			Cytotechnologist	18.25			24.93	0.415
14	14014	Electron Microscopy Tech			Electron Microscopy Tech	13.69			18.70	0.312
14	14016	Flow Tech*	Secretary, II	12.03					16.43	0.274
14	14017	Histotechnologist			Histology Technician	13.43			18.35	0.306
14	14018	Lab Tech			Medical Lab Technician	12.66			17.29	0.288
LPNs and RNs										
1	1033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
2	2033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
3	3033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
4	4033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
5	5033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
6	6033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
7	7033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
8	8033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
9	9033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
10	10033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
12	12033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
13	13033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
13	13042	RNCard	RN,IV	25.20					34.42	0.574
14	14033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
15	15033	RN	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422
7	7019	LPN	LPN, II	11.74					16.04	0.267
8	8019	LPN	LPN, II	11.74					16.04	0.267
12	12019	LPN	LPN, II	11.74					16.04	0.267
13	13019	LPN	LPN, II	11.74					16.04	0.267
12	12034	Scrub Nurse	RN, II	18.52	RN, staff	18.68	RN	18.01	25.30	0.422

Individual Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)	Total Comp. (95$)	Total Comp. Per Min. (95$)
Other										
1	1028	Physical Therapy Aide	LPN, I	10.21			Health Aide, excl. nursing	7.89	13.95	0.232
3	3028	Physical Therapy Aide	LPN, I	10.21			Health Aide, excl. nursing	7.89	13.95	0.232
4	4020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162
4	4008	Counselor	RN, II	18.52					25.30	0.422
5	5024	Orthoptist**							18.92	0.315
6	6011	Dosimetrist			Dosimetrist	21.98			30.02	0.500
6	6015	Film Librarian			Librarian	17.07			23.32	0.389
6	6029	Physicist							58.06	0.968
6	6032	Registered Dietician			Registered Dietician	16.03			21.90	0.365
6	6038	Tech Aide	Med. Mach. Oper. Technician, I	9.89					13.51	0.225
7	7043	Psychologist							49.26	0.821
8	8020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162
8	8035	Social Worker					Social Worker	14.46	19.75	0.329
9	9003	Audiologist			Audiologist	18.06			24.67	0.411
9	9020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162
9	9037	Speech Pathologist			Speech Pathologist	18.39			25.12	0.419
10	10027	Physical Therapist			Physical Therapist	20.09			27.44	0.457
10	10020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162
12	12020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162
12	12025	PA			Surgeon's Assistant	18.09			24.71	0.412
12	12026	Perfusionist			Clinical Perfusionist	31.76			43.38	0.723
13	13025	PA			Physician's Assistant	23.80			32.51	0.542
13	13025	Physician Assistant			Physician's Assistant	23.80			32.51	0.542
13	13020	Medical Assistant	Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41	9.70	0.162

Notes:

BLS wage data is representative of all health services, including hospitals.
UTMB wage data is representative of hospitals and medical schools.
CPS wage data is representative of all health services, including hospitals.
No adjustment factors were applied to the wages to compensate for the different sample universes.

UTMB's Surgeon's Assistant is a staff type specifically trained to assist the cardiac surgeon, therefore, it is used instead of the Physician's Assistant for CPEP 12 only.
Wage for physical therapy aide approximated with the wage for an LPN, level I. The level of education and training required for each occupation is similar.
Wage for counselor proxied with RN,II. Counselor is used for abortion code. Information from Susan Silver at the National Abortion Federation indicated a pay range of $30,000 to $40,000 per year.
Physicist's salary data obtained from the American Association of Physicists in Medicine, Survey of Professionals for calendar year 1995, published in the Spring 1996 report. Based upon a national average annual salary for both certified and non-certified medical physicists, $88,400 or $42.50 per hour. Statistically valid data not available from any of the three data sets.
Psychologist's salary data obtained from American Psychological Association.
Mappings for the following staff types were based upon recommendations by Grant Bagley, MD (HCFA): C06K CAT Scan Tech; C06P Vascular Tech; C13S Cardiovascular Tech; C14C Anesthesia Tech.

Individual Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)	Total Comp. (95$)	Total Comp. Per Min. (95$)

* Flow tech used in one procedure. The tasks performed by this staff type are consistent with those typically performed by a medical secretary, therefore, pay for a medical secretary is used as a proxy.

** Wage for certified retinal angiographer, orthopotist based upon data obtained from AUPO Administrators Survey, January 1995. Orthoptist annual salary for 1994 $28,148. CRA annual salary for 1994 $27,235.

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
Clinical											
1	1131	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	1131	MA				Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	1131	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	1131	Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
1	**1131**	**RN/LPN/MA/Tech**	**11.81**	**16.14**	**0.269**						
1	1133	MA				Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	1133	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
1	**1133**	**RN/MA**	**14.31**	**19.55**	**0.326**						
2	2143	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	2143	Ultrasound Tech				Med. Mach. Oper. Technician,	9.89	Ultrasound Technologist	17.07	Hlth Technol/Technic, NEC	10.59
2	**2143**	**RN/Ultrasound Tech**	**17.80**	**24.31**	**0.405**						
3	3141	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	3141	Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
3	**3141**	**RN/Tech**	**14.21**	**19.40**	**0.323**						
3	3142	PA						Physician's Assistant	23.80		
	3142	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	3142	Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
3	**3142**	**RN/Tech/PA**	**17.40**	**23.77**	**0.396**						
3	3136	Nurse Practitioner				RN, III	25.18	Nurse Practitioner	24.27		
	3136	PA						Physician's Assistant	23.80		
	3136	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
3	**3136**	**RN/NP/PA**	**22.20**	**30.32**	**0.505**						
3	3139	Cast Tech								Hlth Technol./Technic., NE	10.59
	3139	PA						Physician's Assistant	23.80		
	3139	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
3	**3139**	**RN/PA/Cast Tech**	**17.64**	**24.09**	**0.402**						
3	3134	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	3134	Med Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
	3134	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
3	**3134**	**RN/Med Tech/MA**	**11.84**	**16.17**	**0.269**						
3	3129	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	3129	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
3	**3129**	**RN/LPN**	**17.09**	**23.35**	**0.389**						
4	4133	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	4133	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
4	**4133**	**RN/MA**	**14.31**	**19.55**	**0.326**						

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
5	5127	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	5127	Ophthalmic Technician*	10.16					Opthalmic Technologist	13.61		
	5127	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	5127	Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
5	**5127**	**OMP (Ophth Med Pers)**	**12.58**	**17.18**	**0.286**						
5	5121	Cert. Ophthal. Medical Tec	12.64								
	5121	Cert. Ophthal. Technician*	11.25					Opthalmic Technologist	13.61		
	5121	RN (skilled)				RN, II	18.52	RN, Staff	18.68	RN	18.01
	5121	Certified Scrub Tech						Surgical Technologist	11.49		
5	**5121**	**COMT/COT/RN/CST**	**13.48**	**18.41**	**0.307**						
5	5128	Optician **				LPN, II	11.74	LPN	11.77	LPN	11.49
	5128	Cert. Ophthal. Medical Tec	12.64								
5	**5128**	**Optician/COMT**	**12.19**	**16.65**	**0.278**						
7	7129	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	7129	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
7	**7129**	**RN/LPN**	**17.09**	**23.35**	**0.389**						
8	8133	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	8133	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
8	**8133**	**RN/MA**	**14.31**	**19.55**	**0.326**						
8	8144	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	8144	Scrub Nurse				RN, II	18.52	RN, Staff	18.68	RN	18.01
8	**8144**	**Scrub Nurse/RN**	**18.52**	**25.30**	**0.422**						
8	8138	PA						Physician's Assistant	23.80		
	8138	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
8	**8138**	**RN/PA**	**18.79**	**25.67**	**0.428**						
9	9130	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	9130	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	9130	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
9	**9130**	**RN/LPN/MA**	**13.94**	**19.05**	**0.317**						
9	9129	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	9129	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
9	**9129**	**RN/LPN**	**17.09**	**23.35**	**0.389**						
10	10137	Oncology Certified Nurse				RN, III	25.18	Clinical Nurse Specialist	23.66		
	10137	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
10	**10137**	**RN/OCN**	**21.85**	**29.85**	**0.497**						
10	10140	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	10140	Respiratory Therapist						Respiratory Therapist	15.59	Inhalation Therapist	15.00
10	**10140**	**RN/Respiratory Therapis**	**18.51**	**25.28**	**0.421**						

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
10	10130	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	10130	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	10130	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
10	**10130**	**RN/LPN/MA**	**13.94**	**19.05**	**0.317**						
11	11130	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	11130	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	11130	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
11	**11130**	**RN/LPN/MA**	**13.94**	**19.05**	**0.317**						
12	12133	MA				Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	12133	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
12	**12133**	**RN/MA**	**14.31**	**19.55**	**0.326**						
12	12132	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	12132	PA						Surgeon's Assistant	18.09		
	12132	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
12	**12132**	**RN/LPN/PA**	**17.13**	**23.40**	**0.390**						
12	12138	PA						Surgeon's Assistant	18.09		
	12138	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
12	**12138**	**RN/PA**	**18.50**	**25.27**	**0.421**						
12	12126	Nurse Practitioner				RN, III	25.18	Nurse Practitioner	24.27		
	12126	Physician Assistant						Surgeon's Assistant	18.09		
12	**12126**	**PA/NP**	**21.18**	**28.93**	**0.482**						
13	13146	Medical Assistant				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	13146	Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
13	**13146**	**Tech/MA**	**8.50**	**11.60**	**0.193**						
13	13122	EKG Technician				Med. Machine Oper. Tech, I	9.89	EKG Technician	8.94	Hlth. Technol./Technic.,NE	10.59
	13122	Medical Assistant				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
13	**13122**	**EKG Tech/MA**	**8.02**	**10.96**	**0.183**						
13	13123	EKG Technician				Med. Machine Oper. Tech, I	9.89	EKG Technician	8.94	Hlth. Technol./Technic.,NE	10.59
	13123	Medical Technician				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
13	**13123**	**EKG Tech/Med Tech**	**9.42**	**12.86**	**0.214**						
13	13129	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	13129	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
13	**13129**	**RN/LPN**	**17.09**	**23.35**	**0.389**						
13	13138	PA						Physician's Assistant	23.80		
	13138	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
13	**13138**	**RN/PA**	**18.79**	**25.67**	**0.428**						

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
14	14142	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	14142	Technician				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
	14142	PA						Physician's Assistant	23.80		
14	**14142**	**RN/Tech/PA**	**17.40**	**23.77**	**0.396**						
14	14126	Nurse Practitioner				RN, III	25.18	Nurse Practitioner	24.27		
	14126	Physician Assistant						Physician's Assistant	23.80		
14	**14126**	**NP/PA**	**24.04**	**32.83**	**0.547**						
14	14135	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	14135	Nurse Practitioner				RN, III	25.18	Nurse Practitioner	24.27		
14	**14135**	**RN/NP**	**21.40**	**29.23**	**0.487**						
14	14125	Lab						Medical Lab Technician	12.66		
	14125	Medical Tech				Med. Machine Oper. Tech, I	9.89			Hlth Technol./Technic., NE	10.59
14	**14125**	**Lab Tech/Med Tech**	**11.28**	**15.40**	**0.257**						
14	14124	Histotechnologist						Histology Technician	13.43		
	14124	Lab Staff						Medical Lab Technician	12.66		
14	**14124**	**Lab Tech/Histotech**	**13.05**	**17.82**	**0.297**						
14	14124	Histotech						Histology Technician	13.43		
	14124	Lab						Medical Lab Technician	12.66		
14	**14124**	**Lab Tech/Histotech**	**13.05**	**17.82**	**0.297**						
14	14138	PA						Physician's Assistant	23.80		
	14138	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
14	**14138**	**RN/PA**	**18.79**	**25.67**	**0.428**						
15	15130	LPN				LPN, II	11.74	LPN	11.77	LPN	11.49
	15130	MA				Nursing Assistant II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
	15130	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
15	**15130**	**RN/LPN/MA**	**13.94**	**19.05**	**0.317**						
15	15145	Certified First Asst.						Surgical Technologist	11.49		
	15145	Certified Scrub Tech						Surgical Technologist	11.49		
	15145	Cert. Scrub Tech, First Asst.						Surgical Technologist	11.49		
	15145	RN				RN, II	18.52	RN, staff	18.68	RN	18.01
	15145	RN First Asst.				RN, II	18.52	RN, staff	18.68	RN	18.01
15	**15145**	**Surgery Assistant**	**14.30**	**19.54**	**0.326**						

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
Administrative											
1	1181	Billing Staff				General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30
	1181	Registered Nurse				RN, II	18.52	RN, Staff	18.68	RN	18.01
1	**1181**	**RN/Billing**	**17.80**	**24.32**	**0.405**						
1	1151	Billing Clerk				General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30
	1151	Receptionist				Receptionist	8.02			Receptionist	8.91
	1151	Secretary				Secretary, I	9.44			Secretary	9.99
1	**1151**	**Billing/Rec/Secretary**	**8.86**	**12.10**	**0.202**						
1	1180	Occup. Therapy Aide				LPN, I	10.21			Hlth. Aide, excl. nursing	7.89
	1180	Receptionist				Receptionist	8.02			Receptionist	8.91
1	**1180**	**OT Aid/Receptionist**	**9.12**	**12.45**	**0.208**						
3	3153	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	3153	Receptionist				Receptionist	8.02			Receptionist	8.91
3	**3153**	**Med Sec/Receptionist**	**10.03**	**13.69**	**0.228**						
4	4156	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	4156	Transcriptionist				Secretary, II	12.03			Secretary	9.99
4	**4156**	**Med Sec/Transcriptionis**	**12.03**	**16.43**	**0.274**						
4	4154	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	4154	Receptionist				Receptionist	8.02			Receptionist	8.91
	4154	Scheduling Secretary				Secretary, I	9.44			Secretary	9.99
4	**4154**	**Med Sec/Rec/Sch Sec**	**9.83**	**13.43**	**0.224**						
5	5157	Billing Staff				General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30
	5157	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	5157	Scheduling Secretary				Secretary, I	9.44			Secretary	9.99
	5157	Surgery Coordinator				Secretary, I	9.44			Secretary	9.99
5	**5157**	**OBP (Ophthal Bus Pers)**	**10.22**	**13.96**	**0.233**						
7	7152	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	7152	Billing				General Clerk, III	9.97	Patient Account Rep.	10.18	Billing Clerk	9.30
7	**7152**	**Med Sec/Billing**	**11.00**	**15.03**	**0.250**						
9	9182	Office Manager								Mgr, Medicine & Health	17.22
	9182	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
9	**9182**	**RN/Office Manager**	**18.38**	**25.11**	**0.418**						
11	11183	Receptionist				Receptionist	8.20			Receptionist	8.91
	11183	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	11183	Scheduling Secretary				Secretary, I	9.44			Secretary	9.99
11	**11183**	**Sch Sec/RN/Rec**	**12.05**	**16.46**	**0.274**						
12	12183	Receptionist				Receptionist	8.20			Receptionist	8.91
	12183	RN				RN, II	18.52	RN, Staff	18.68	RN	18.01
	12183	Scheduling Secretary				Secretary, I	9.44			Secretary	9.99
12	**12183**	**Sch Sec/RN/Rec**	**12.05**	**16.46**	**0.274**						

Composite Staff Type Mapping to Available Data

CPEP	CODE	STAFF TYPE	(Wtd) Avg Mapped Wages	Total Comp. (95$)	Total Comp. Per Min. (95$)	BLS	Hrly Wage (95$)	UTMB	Hrly Wage (95$)	CPS	Hrly Wage (95$)
13	13155	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	13155	Scheduling Secretary				Secretary, I	9.44			Secretary	9.99
13	**13155**	**Med Sec/Sch Sec**	**10.74**	**14.66**	**0.244**						
14	14178	Clerk				General Office Clerk, II	8.51			General Office Clerk	8.99
	14178	MA				Nursing Assistant, II	7.10	Nurse Aide	7.87	Nursing Aide	7.41
14	**14178**	**MA/Clerk**	**7.48**	**10.22**	**0.170**						
14	14179	Medical Secretary				Secretary, II	12.03			Secretary	9.99
	14179	Lab Tech						Medical Lab Technician	12.66		
14	**14179**	**Med Sec/Lab Tech**	**12.35**	**16.86**	**0.281**						

Notes:
BLS wage data are representative of all health services, including hospitals.
UTMB wage data are representative of hospitals and medical schools.
CPS wage data are representative of all health services, including hospitals.
No adjustment factors were applied to the wages to compensate for the different sample universes.

*Wages for COMT, COT, and non-certified ophthalmic tech obtained from the AUPO Administrator's Salary Survey, January 1995. No data were available from the standard three sources. Annual 1994 salary for COMT $25,666; COT $22,855; non-certified ophthalmic tech $20,629.
**Optician's wages approximated with LPN,II wage. Data of nationally representative wages for opticians not available. Society data reported in BLS Occupational Outlook Handbooks range from $10.08 per hour to 14.25 per hour (1992 $).
UTMB's Surgeon's Assistant is a staff type specifically trained to assist the cardiac surgeon, therefore, it is used instead of the Physician's Assistant for CPEP 12 only.
1990 Census weights (for physician office setting only) applied to the following staff types:
RN/MA; RN/LPN; RN/PA; RN/LPN/MA; RN/Respiratory Therapist; RN/LPN/PA; billing staff/RN; billing clerk/receptionist/secretary; office manager/RN; clerk/MA.
Census weights based upon employment in ANY health practitioners' offices were tried and compared to those used; the results were similar.

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