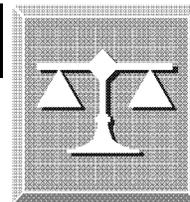


TS-53 July 1981

**General Schedule
Position Classification Standards**



WCPS-2 August 2002

**POSITION CLASSIFICATION
STANDARD
FOR
Medical Supply Aide
and Technician
Series, GS-0622**



**Workforce Compensation
and Performance Service**



Medical Supply Aide and Technician Series

GS-0622

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SERIES DEFINITION

This series contains positions the duties of which are to provide wards, clinics, operating rooms, and other hospital facilities with medical supplies, instruments, sets, and equipment. Duties require a knowledge of aseptic techniques and sterilization practices; the care, functioning, and uses of supplies, equipment, sets, and instruments; and methods for the preparation, storage, and issue of sterile and non-sterile medical supplies and the maintenance of adequate stock levels.

This standard supersedes the standard for the Medical Aid (Sterile Supplies) Series, GS-622 issued in June 1966.

EXCLUSIONS

Excluded from this series are:

1. Positions where the principal duties, knowledges, and responsibilities relate to the acquisition, storage, and issue of supplies but which do not require a knowledge of asepsis, sterilization techniques, and the functions and uses of medical instruments, belong in other more appropriate series in the [GS-2000 Supply Group](#).
2. Positions responsible for cleaning, assembling, and sterilizing operating room, clinic, and ward medical instrument trays and sets, but with primary emphasis on providing patient care or passing instruments to surgeons during operations, belong to other more appropriate series, such as the [GS-0620 Practical Nurse Series](#) or the [GS-0621 Nursing Assistant Series](#).
3. Positions which involve duties similar to those of medical supply aides and technicians but with manual skills and knowledges as the paramount requirement are placed in the Federal Wage System. In medical supply aide and technician positions, knowledge of aseptic techniques and sterilization practices, technical nomenclature, and general operation and use of the medical supply items is the paramount requirement of the work; manual dexterity, while essential, is secondary. Where emphasis is on appropriate means for cleaning, storing, and issuing medical supplies, and there is no requirement to be currently familiar with the use of such equipment, the positions do not belong in the GS-0622 Medical Supply Aide and Technician Series.
4. Positions primarily concerned with clerical work such as preparing production reports, inventory records, or other property record keeping duties are classifiable to an appropriate clerical series (e.g., [GS-0300 Group](#), [GS-2000 Group](#)).
5. Positions the principal duties of which are to perform restricted phases of pharmaceutical work such as bulk compounding of pharmaceuticals; the preparation, storage, and issuance of sterile solutions; the repackaging of pharmaceutical items; and the distribution of medicaments and drug supplies are classifiable to the [Pharmacy Technician Series, GS-0661](#).

Medical supply assistants may prepare and issue a few sterile solutions (e.g., saline) for external use. Pharmacy technicians on the other hand, prepare a variety of solutions for internal use (e. g., parenteral injectables).

OCCUPATIONAL INFORMATION

Medical supply aides and technicians clean, package, assemble, sterilize, and distribute supply items used for patient care in hospital wards and clinics. Usually they are assigned to the central supply service of the hospital, but may work in either a central supply processing and distribution area or the patient care areas. At one time, these employees, dealt with a limited number of reusable, sterile, medical supply items. Now, most process, prepare, and distribute the complete range of clean and sterile medical supplies required for patient care, including a wide range of disposable items. In addition, many process, prepare, and distribute all the supplies, including instrument trays and sets used in the full range of surgical operations.

The term "medical supply item" as used in this standard refers to disposable and reusable supply items for patient care, including instruments (scissors, forceps, retractors), medical equipment (suction machines, K-thermia units, inhalation therapy machines), trays and sets (suture sets, major orthopedic sets, aortogram trays), and various other items such as thermometers, needles, tubing, glassware, and metalware.

The following work is commonly performed by medical supply aides and technicians. The description is divided into three main areas, and typically these employees perform duties in all three areas. When this is not the case, they are at least familiar with the duties carried out in the other areas. These divisions of work, and the specific work procedures used, vary depending upon the facilities of the hospital and management expectations.

1. Processing/Decontamination -- Processing and decontamination involve all the actions required prior to sterilizing and issuance. The primary function of processing is cleaning the supply items. Cleaning consists of one or more methods of removing gross contamination, such as soaking in a germicide, washing with a detergent-blood solvent, scrubbing with a brush and scouring powder, rinsing in tap and then distilled water, or washing in washer-sterilizer and ultrasonic units. Some items must be disassembled before cleaning. In some cases (e.g., biological contamination), items must be presterilized before being handled in the processing unit.

During processing (and during preparation as described below) the employees visually examine the items for damage, deterioration, or imperfections such as rust, pitting, and cracks. They operate the medical equipment to determine whether it is operating correctly and to ensure that the items were reassembled correctly after cleaning. For example, the suction machines are checked for suction, mattresses of K-thermia units are filled and checked for holes and overheating, and inhalation therapy machines are checked to see if the bellows are moving and if the movement varies with the different settings on the machine. Medical equipment that is malfunctioning or damaged is sent to another office to be repaired or discarded.

Processing requires knowledge of varied cleaning procedures; knowledge of which procedures to use for the different items; and knowledges and skills to operate the medical and other equipment such as washer-sterilizers, automatic washers, automatic dryers, and ultrasonic units.

2. Preparation -- Preparation involves all duties required to assemble, package, wrap, and sterilize the medical supply items. The items are packaged individually (e.g., scissors, tubing, gauze) or are assembled into trays and sets. Frequently, some items are packaged both individually and as part of a tray or set. In any case, the items are first visually examined for cleanliness and, as described above in the processing section, for signs of damage, deterioration, and imperfection. Tests of the condition of the supply items are also required such as scissors for smooth and easy opening.

If the item is to be packaged individually, the technician packages the item, determines the method of sterilization, puts a piece of chemical indicator tape on the package, labels the package if the supply item is not visible, and places the package on the carrier that is used in the sterilizer.

If the items are to be assembled into a tray or set, the technician selects the various supply items needed; assembles the items according to guides that specify kinds and numbers of instruments and supplies to be included; arranges the items on the tray in a logical manner that permits effective penetration of the sterilizing medium and prevents damage to points, blades, and delicate instruments; wraps and labels the tray; determines the correct method of sterilization; puts a piece of chemical indicator tape on the package, and places it on a carrier that is used in the sterilizer.

A tray or set is a group of various supply items, primarily instruments, specified for a given purpose. The instruments required for each tray or set differ as to the general class or kind of instrument; the specific type within the general class or kind of instrument (e.g., curved mosquito forceps, straight mosquito forceps, toothed tissue forceps, rat tooth tissue forceps, thumb forceps); and frequently, as to size. There may be variations due to a particular request of a physician or nurse. A tray or set often is used for a variety of different procedures, sometimes supplemented by other supply items. A tray or set can vary in complexity from one with a single, common-use item that takes a few seconds to assemble to one with over a hundred items that may take as long as an hour to assemble.

The number of trays and sets the medical supply unit is responsible for assembling varies among hospitals and depends upon the variety of medical specialties provided by the hospital, the facilities of the hospital, and whether the medical supply unit provides complete supply service to the operating room.

Sterilizing the items involves determining the proper sterilizing method, placing the carrier containing the supply items in the sterilizer and operating the sterilizer (typically a gas, steam high vacuum, or steam gravity sterilizer). Usually, all items in a set are treated for the same period of time, the one common exception being liquids. Liquids usually are sterilized separately for varying times. The employee adds to the carriers any required control tests

such as a Bowie-Dick test or spore strips according to established procedures. At the end of the sterilizing period, the employee compares the control tests with a graph for each sterilizer to determine whether the correct parameters (e.g., time, temperature, pressure) were obtained. Any deviations from the normal or expected parameters are noted and corrective steps are taken. All supply items sterilized by gas are placed in an aerator for an established period. On each sterile supply item, the employee places a label that shows the expiration date, the date sterilized, the sterilizer used, and, when necessary, the number of times the sterilizer is used each day. Many medical supply units also color code the sterile supply package, to show the expiration date.

Preparation of the medical supply items requires knowledge of the nomenclature of the items, the physical characteristics of each item, the general use of each item, and the method of sterilization for each item.

3. Distribution -- Distribution involves providing the user wards, clinic units, and operating room suites with medical supply items. Items are usually distributed to the ward and clinic units on an established quota basis, supplemented by special requests and to operating rooms based on scheduled activities. The technician may (a) replenish a supply cart to reattain the established quota level for each item on the cart and exchange the cart with one on the ward or clinic unit or (b) go to the user units to inventory supplies and then obtain supplies for each unit to fill needs as determined by the inventory. In either case the technician checks the expiration date on all sterile supply items, removes all outdated items, and rotates the stock. The rest of the supply items are distributed upon special request. In some hospitals, the supply items are distributed only on a requisition basis.

To distribute medical supply items, technicians must know the names of the different supply items including the trays and sets, and must understand, generally, how items are used in case the user refers to them by another name (e.g., a bone marrow tray is the same as a Sterno puncture tray). The technician must know how to modify trays (e.g., how to change a liver biopsy tray to a kidney biopsy tray with the addition of one specific needle).

In many hospitals, technicians must operate equipment such as dumbwaiters, elevators, or automatic transport systems to distribute items.

In addition to the work outlined above, medical supply aides and technicians typically perform some clerical, stock control, and storage work. This includes such tasks as receiving new supplies from supply sources; checking supplies delivered for shortages, breakage, etc.; recording errors or damages detected; placing items in proper storage locations in supply rooms; and participating in periodic physical inventory of medical supply items.

There are two major approaches to medical supply operations in Federal hospitals with, of course, variations in between. In the first approach, the supply operation is not managed by medical personnel but instead by technically trained and oriented medical supply specialists. Ward, clinic, and operating room medical personnel are not involved with the details of procuring supplies; establishing stock levels; setting up procedures and techniques for decontaminating, preparing, sterilizing, stocking, and issuing supplies; and managing and

supervising the medical supply operation personnel. Instead, medical supply technical personnel, in consultation with medical personnel, establish procedures, assure quality control, and systematically provision ward, clinic, and operating room areas with supplies and equipment to meet established stock levels and scheduled activities. The "two-way closet" system is indicative of this approach where medical supply personnel replenish individual rooms and ward areas from closet doors opening to the corridor while nursing personnel obtain the supplies and return contaminated equipment from doors that open into the patient area. This allows patient care personnel to minimize their concern for the ready availability of supplies and equipment.

In this approach, the medical supply technician is in more frequent contact with medical personnel and has occasion to explain supply operations, equipment resources and limitations, and to help resolve malfunctions of equipment. The higher grade-level benchmark descriptions in this standard apply to this kind of situation where the medical supply technician uses a background of experience and training in processing medical supply equipment and in advising on the medical supply resources.

In another approach, the medical supply operation is managed by medical personnel as a part of the overall hospital patient care administration. Since the managers and supervisors are the users of the service the individual medical supply technician has less need for contacts outside the immediate organization. Contacts between users and the supply organization are more structured and are usually through supervisory channels. The individual technician does not need to have or use as extensive a knowledge of medical procedures and medical supply resources.

TITLES

Medical Supply Aide is the title for nonsupervisory positions below GS-4.

Medical Supply Technician is the title for nonsupervisory positions at GS-4 and above.

Supervisory or Lead (e.g., Supervisory Medical Supply Technician, Lead Medical Supply Technician) should be added to titles that meet the criteria contained in the [General Schedule Supervisory Grade Guide](#) and the [General Schedule Leader Grade Evaluation Guide](#), respectively.

EVALUATION OF POSITIONS

The grade-level criteria in this standard are to be used to evaluate nonsupervisory positions. Positions should be evaluated on a factor-by-factor basis, using one or more of the comparable Office of Personnel Management benchmarks or factor level descriptions, or both. Only the designated point values may be used. The absence of a benchmark at a certain grade level does not preclude evaluating positions at that grade. More complete instructions for evaluating positions are contained in the [Introduction to the Position Classification Standards](#).

GRADE CONVERSION TABLE

Total points on all evaluation factors are converted to GS grade as follows:

GS Grade	Point Range
1	190-250
2	255-450
3	455-650
4	655-850
5	855-1100
6	1105-1350

FACTOR LEVEL DESCRIPTIONS

FACTOR 1, KNOWLEDGE REQUIRED BY THE POSITION

This factor measures the nature and extent of information or facts which the aide or technician must understand to do acceptable work (e.g., steps, procedures, practices, rules, policies, theories, principles, and concepts) and the nature and extent of the skills needed to apply those knowledges. To be used as a basis for selecting a level under this factor, a knowledge must be required and applied.

Level 1-1 -- 50 Points

Knowledge to perform basic, repetitive tasks such as removing carts from elevators or conveyor systems to the decontamination area, washing carts by hand with cleaning solutions, folding and stacking linen, and checking the labels on sterilized packages for expiration dates.

Skills to operate simple equipment that requires minimal training, such as a heat-sealer machine

OR

Equivalent knowledges and skills.

Level 1-2 -- 200 Points

Knowledge of the precautions to take while handling trays of sharp or delicate instruments or of contaminated medical equipment and supplies.

Knowledge of medical supply processing and distribution operations and equipment sufficient to remove various kinds of gross soil by appropriate methods, such as rinsing, use of moist gauze sponge, or soaking in cleaning solutions; to sort baskets of presterilized equipment into broad categories (syringes, jawed instruments, basins); to set up and wrap trays or sets such as linen packages, basin sets, and emesis trays; and to fill requisitions for ward supplies by locating appropriate items from stock and loading ward carts or assisting in inventorying by counting and recording the quantity of items.

OR

Equivalent knowledges and skills.

Level 1-3 -- 350 Points

Knowledge of the way infection is spread sufficient to understand the importance of clean and sterile medical supply operations and practices to patient care and the precautions to take with contaminated supply items.

Knowledge of the technical names, general uses, physical characteristics and the procedures for inspecting, disassembling, and reassembling; decontaminating; packaging; sterilizing; storing; and issuing the full range of medical supplies and equipment used in the wards and clinics of the hospital.

Knowledge to operate various kinds of processing equipment such as washer-sterilizers, ultrasonic instrument cleaners, steam-vacuum and gas sterilizers, and aerators and to test the proper operation of the equipment, adjust operating conditions, and report malfunctions.

OR

Equivalent knowledge and skills.

Level 1-4 -- 550 Points

Practical knowledge of microbiology, human anatomy and physiology, and medical and surgical procedures combined with an intensive knowledge of asepsis techniques and the functions and activities of the wards, clinics, and operating room suite sufficient to meet recurring, emergency, or special individual medical supply and equipment needs and to advise medical personnel on the availability and economical use of supplies and equipment, appropriate sizes, possible substitutes, and the proper use and troubleshooting of equipment.

Knowledge of the technical names, uses, physical characteristics, maintenance procedures, and assembly, adjustment, and processing procedures for the full range of medical and surgical supplies and equipment used in the hospital. This includes the more delicate and costly equipment such as microsurgery instruments, camera lenses, and complex medical equipment which requires, expert care, careful attention, and precise adjustments.

Knowledge and skills to properly assemble the full range of trays and sets used in the hospital, including those used in the operating room suite.

Proficiency in the selection, use, testing, and adjustment of the various washers, sterilizers, aerators, and other equipment, and the appropriate cleaning agents and techniques to use for a wide variety of equipment (stainless steel instruments, titanium instruments, flexible tubing, mammary prostheses, electric drills).

OR

Equivalent knowledges and skills.

FACTOR 2, SUPERVISORY CONTROLS

This factor covers the nature and extent of direct or indirect controls exercised by the supervisor, the employee's responsibility, and the review of completed work. Controls are exercised by the supervisor in the way assignments are made, instructions are given, priorities and deadlines are set, and objectives and boundaries are defined. The responsibility of the employee depends upon the extent to which the employee is expected to develop the sequence and timing of various aspects of the work; to modify or recommend modification of instructions; and to participate in establishing priorities. The degree of review can range from detailed instructions and close review of the work during progress and upon completion for trainee assignments to an evaluation of performance through general comments received from users of the service and reports of the hospital's infection committee for technicians assigned to night and weekend shifts.

To a large degree, the user units' activities control the work organization and schedule. The supervisor assigns certain work to certain positions to ensure that work is completed within set times. The scheduling of some functions, such as picking up or delivering supply items, is preestablished so that user units can plan their work. For example, soiled operating room supply items are not available until late in the day and must be processed and prepared as soon as possible so that the items are available for use in case of an emergency or for the next day. Another constraint requiring a set routine is that certain work must be completed so that a full load for the gas sterilizer is ready early in a shift, allowing the sterilization cycle to be completed by the end of the shift. This is particularly important in a medical supply unit with no service, or very limited service, on evening and night shifts. The supervisor also sets certain general priorities for the employee to fulfill the medical supply needs of the user units adequately and efficiently.

Level 2-1 -- 25 Points

For all assignments the supervisor gives specific and detailed instructions concerning how to perform the work and the references available. The employee must work according to these instructions and refer to the supervisor all matters not specifically covered. The work is reviewed in progress and upon completion for accuracy and adherence to instructions and established procedures.

Level 2-2 -- 125 Points

The supervisor assigns the work indicating what is to be done; quality and quantity expected; and limitations, deadlines, and priorities. Typically the supervisor does this by dividing the work of the medical supply unit into work assignments and providing a written work routine for each assignment. Illustrative assignments are: decontamination assignment (responsible for cleaning the supply items); equipment assignment (responsible for disassembling, cleaning, sterilizing, assembling, and checking for correct operation of all inhalation therapy equipment); or preparation assignment (responsible for preparing treatment, diagnostic, or operating room trays and sets). For each work assignment the supervisor provides any additional, specific instructions as to work methods for unusual situations. As a general rule, the supervisor assigns the employee to one or more of these work assignments on a rotational basis for a given period of

time, although, in some instances, the employee is permanently on one work assignment. The employee is responsible for being familiar with, and independently completing the work assignment. Problems or questions not covered by instructions or established procedures are referred to the supervisor for assistance or a decision. The employee is expected to accommodate special requests and emergencies within the priorities and instructions set by the supervisor. The work is spot-checked for accuracy and compliance with established instructions and procedures.

Level 2-3 -- 275 Points

The supervisor assigns employees to work areas on a continuing or rotational basis. The characteristics and use of new instruments, equipment, and aseptic techniques are taught through periodic formal training sessions.

The employee completes work based on accepted work procedures. Normally, the employee will inform the supervisor of problems or unusual situations that arise with recommendations for appropriate action. On shift and weekend assignments, however, the employee independently resolves these situations through negotiation and consultation with other medical personnel. Completed work is reviewed through on-site inspection of work areas, work reports, and comments from users and the hospital's infection committee.

FACTOR 3, GUIDELINES

This factor covers the nature of guidelines and the judgment needed to apply them. Guides used include manufacturers' literature, manuals prepared by the medical staff for use throughout the agency, charts, pictures or listings of completed trays, standard operating procedures, and written work assignments.

The nature of the work requires that specific instructions, procedures, and policies be established which carefully prescribe many aspects of the work activities of medical supply aides and technicians. This is a necessary extra measure of precaution to protect patients through the assured provision of clean and sterile medical supplies and instruments.

Guidelines should not be confused with the knowledges described under Factor I, Knowledge Required by the Position. Guidelines provide reference data or impose certain constraints on the use of knowledges. A medical supply technician, for example, may be familiar with the procedures for more than one method of sterilizing certain supplies, but medical policy at the installation may, nevertheless, specify that only one method be used.

Level 3-1 -- 25 Points

The employee is provided specific, detailed guidelines for performing the work. Typically, the guidelines are manuals or handbooks that include:

1. Specific procedures and instructions for performing the work carried out in the various parts of the medical supply unit (e.g., procedures for cleaning the work area, handling contaminated items, operating the cleaning equipment, operating the sterilizers and aerators, folding cloth items, stocking shelves, and issuing supplies);
2. Lists of medical supply items or types of items (such as metalware, instruments) and a statement as to which processing, preparation, and sterilization methods to use for the items on the list; and
3. A list for each tray or set prepared in the medical supply unit that states the name and quantity of each item included in the tray or set. The list usually indicates, by the order of the items on the list, the correct placement of the items in the tray or set. Some medical supply units have, in addition to the lists, pictures of the trays and sets, and color coding.

Other references typically provided include books consisting of pictures of medical instruments and their technical names, and manufacturers' operating handbooks for the cleaning and sterilization of their medical equipment. The employee works in strict adherence to the guidelines and any deviations must be authorized by the supervisor.

Level 3-2 -- 125 Points

Many aspects of the work are covered by written procedures such as cards specifying the items to be included on a tray or in a set and manuals for operating washing and sterilizing equipment as at the next lower level. However, at this level the employee is expected to be thoroughly familiar with a large number of guidelines consisting of manufacturers' catalogs which list and illustrate various kinds of instruments; use, assembly, and disassembly instructions for medical equipment; standard operating procedures covering the routine aspects of the various assignments; written or oral instructions from medical personnel concerning desired modifications in trays or sets, and written material and texts on aseptic techniques, bacteriology, anatomy, and medical procedures.

The employee selects appropriate guidelines and determines such matters as:

1. The best method for sterilizing different parts of a medical machine based on general knowledges and principles such as knowledge of the resistance of various materials to heat, time constraints, advantages and disadvantages of detergents, cost of materials, scarcity of items, and operating room schedules; and
2. Arrangement of instruments in complex trays or sets based on general considerations such as which instruments will be used first, heavier instruments should be on the bottom of the tray, delicate instruments need to be protected by wrappings, cup-shaped instruments are to be placed to permit drainage, points and blade edges should be protected; or

3. The need to substitute closely related items due to unavailability of desired ones or to limit the amount of scarce supplies issued to any one requisitioner.

FACTOR 4, COMPLEXITY

This factor covers the nature, number, variety, and intricacy of tasks, steps, processes, or methods in the work performed; the difficulty in identifying what needs to be done; and the difficulty and originality involved in performing the work.

Level 4-1 -- 25 points

The work assignments consist of a few, straightforward, simple duties such as cleaning the work area, folding sheets and towels, and checking the items in the sterile medical supply room for out-dated items. The work to be performed is obvious and the procedures to use are readily determined. Typically, the duties are quickly learned.

Level 4-2 -- 75 Points

At any one time, the assignments consist of several related duties such as those involved in decontaminating, cleaning, and presterilizing medical supply items processed by the medical supply unit, inventorying and replenishing the medical supply areas of the ward and clinic units, or assembling and sterilizing the full range of trays and sets used in a medical and surgical facility. Determining what needs to be done involves choosing the correct items, inspecting them for removal of gross contamination and properly placing them on trays or sets taking care to protect delicate instruments, points, and cutting edges. Examples of steps involved are: determining whether a needle is reusable or disposable; identifying damaged or malfunctioning supply items; separating a wide range of dirty items according to correct cleaning procedures; disassembling, cleaning, removing all traces of lint and dust, and reassembling complex medical machinery to close tolerances using torque wrenches; assembling a tray or set according to a list of the items to be included and general knowledge of the use of the tray; and recommending the stocking of an item in a medical supply area or ward because it is frequently requested by the medical personnel.

Because of the need to process large numbers of items as quickly as possible, sustained concentration is required to discern differences among many instruments and to insure that instruments are suitable for reuse.

FACTOR 5, SCOPE AND EFFECT

This factor covers the relationship between the nature of the work, i.e., the purpose, breadth, and depth of the assignment and the effect of work products or services both within and outside the organization.

In this occupation, effect measures such things as whether the work output eases the work of others, provides timely services of a personal nature, or affects the adequacy of research conclusions. Effect alone does not provide sufficient information to properly understand and evaluate the impact of the position. The scope of the work completes the picture, allowing consistent evaluations. Only the effect of properly performed work is to be considered.

Level 5-1 -- 25 Points

The work involves the performance of a few, limited duties required to process, prepare, and distribute medical supply items. The work has limited impact outside the medical supply unit and is primarily to facilitate the work of experienced medical supply aides or technicians by performing the repetitive and simple duties and tasks of the work.

Level 5-2 -- 75 Points

The work involves completing the full range of tasks in any one or more of the various assignments in the medical supply unit, such as decontaminating and presterilizing used materials, preparing trays and sets for sterilization, storing and issuing clean and sterile medical supplies, or maintaining normal stock levels on wards and in clinics.

The work product can have a direct effect on the physical health of patients in the hospital.

NOTE: The description of effect at this level has some aspects similar to Level 5-3 of the Primary Standard. However, since level 5-3 is not fully met, Level 5-2 is appropriate.

FACTOR 6, PERSONAL CONTACTS

This factor includes face-to-face and telephone contacts with persons not in the supervisory chain. (NOTE: Personal contacts with supervisors are covered under Factor 2, Supervisory Controls.) Levels described under this factor are based on what is required to make the initial contact, the difficulty of communicating with those contacted, and the setting in which the contact takes place.

Above the lowest level, points should be credited under this factor only for contacts which are essential for successful performance of the work and which have a demonstrable impact on the difficulty and responsibility of the work performed.

The relationship between Factors 6 and 7 presumes that the same contacts will be evaluated for both factors. Therefore, use the personal contacts which serve as the basis for the level selected for Factor 7 as the basis for selecting a level for Factor 6.

Level 6-1 -- 10 Points

The personal contacts are with other employees within the medical supply unit.

Level 6-2 -- 25 Points

Personal contacts are with employees in the same unit; with nursing and other medical personnel in the wards, clinics, and operating room suites; and occasionally with employees in other Federal and non-Federal hospitals.

FACTOR 7, PURPOSE OF CONTACTS

Purpose of personal contacts ranges from factual exchanges of information to situations involving significant or controversial issues and differing viewpoints, goals, or objectives. The personal contacts which serve as the basis for the level selected for this factor must be the same as the contacts which are the basis for the level selected for Factor 6.

Level 7-1 -- 20 Points

The purpose of the personal contacts is to exchange factual information concerning the work, such as contacts to receive requests for medical supply items, to state whether a medical supply item is available, to suggest an acceptable substitution for an unavailable item, to explain the need for limiting quantities of scarce supplies, or to obtain additional information about a requested item such as its use and shape, or to provide technical advice on the use and troubleshooting of equipment. The contacts also may be to give factual information to patients and visitors, such as giving directions to another area within the hospital.

FACTOR 8, PHYSICAL DEMANDS

This factor covers the requirements and physical demands placed on the medical supply aide and technician by the work assignment. This includes physical characteristics and abilities (e.g., specific agility and dexterity requirements) and physical exertion involved in the work (e.g., climbing, lifting, pushing, balancing, stooping, kneeling, crouching, crawling, or reaching). To some extent, the frequency or intensity of physical exertion is also considered (e.g., a job requiring prolonged standing involves more physical exertion than a job requiring intermittent standing).

Level 8-1 -- 5 Points

The work is sedentary. There may be some walking, bending, standing for short periods of time, or carrying of light medical supply items, but no special physical requirements are necessary to perform the work.

Level 8-2 -- 20 Points

The work requires regular and recurring physical exertion such as standing for prolonged periods of time, carrying medical supply items weighing up to 50 pounds, pushing medical supply carts weighing up to 200 pounds, or frequent bending and stretching. The work requires dexterity in such tasks as inserting small rods into needle openings or precisely aligning component parts while reassembling medical equipment.

Level 8-3 -- 50 Points

The work requires regular and recurring strenuous physical exertion such as lifting medical supply items weighing more than 50 pounds or pushing heavy medical supply carts weighing as much as 600 pounds and working them over rises, such as door sills or positioning them on automatic conveyor tracks.

FACTOR 9, WORK ENVIRONMENT

This factor considers the risks and discomforts in the employee's physical surroundings, the nature of the work assigned, and the safety regulations required. Although the use of safety precautions can practically eliminate a certain danger or discomfort, such situations typically place additional demands upon the employee in carrying out safety regulations and techniques.

Level 9-1 -- 5 Points

Work is normally performed in hospital or clinic wards and supply areas that are adequately heated and ventilated. Normal safety precautions are required.

Level 9-2 -- 20 Points

On a regular and recurring basis, the work involves moderate risks and discomforts such as exposure to dirty supply items; exposure to items contaminated by patients with contagious diseases; or working with or near equipment that has moving parts, is noisy, generates heat, or emits toxic fumes, such as a mechanized transport system, an ultrasonic unit, automatic washers, or gas and steam sterilizers. The employee must comply with special safety and health precautions and use protective clothing or gear such as aprons, gowns, caps, gloves, or ear plugs.



OPM BENCHMARK DESCRIPTIONS

MEDICAL SUPPLY AIDE, GS-0662-02, BMK #1

Duties

Performs a few limited duties required to process, prepare, and distribute medical supply items while maintaining sterile or clean condition of items. Also, receives on-the-job training for additional and more complex duties.

- Assembles a limited number of different trays and sets that consist of a few different instruments and other medical supply items such as towels, gauze, and basins.
- Packages a limited number of different, single items such as gauze, scissors, thermometers, and catheters.
- Folds sheets and other linen used for surgical operations. Assembles packs of linen.
- Puts a strip of the correct chemical indicator tape on items to be sterilized and places items on carriers.
- Operates equipment such as cleaners and heat-sealer machines.
- Cleans the work area.

Factor 1. Knowledge Required by the Position -- Level 1-2 -- 200 Points

Knowledges and skills to perform a few limited duties required to process, prepare, and distribute medical supply items, e.g., knowledge of a limited variety of medical supply items; knowledge of aseptic techniques sufficient to preserve the clean or sterile state of the items handled and of the other items in the work area; knowledge of infection transmission sufficient to understand the importance of the work to patient care and the possible consequences of personal contact with dirty items; and skill to operate simple equipment such as heat-sealer machines.

Factor 2. Supervisory Controls -- Level 2-1 -- 25 Points

All work is assigned by the supervisor with specific instructions as to the work to be done and the guides to be followed. The aide follows these instructions and refers to the supervisor or an experienced medical supply technician all matters not explicitly covered by the instructions or the designated guides. The work is reviewed in progress and upon completion for accuracy and adherence to the instructions and guides.

Factor 3. Guidelines -- Level 3-1 -- 25 Points

Specific, detailed guidelines covering all important aspects of the work are provided to the aide. The aide must work in strict adherence to these guides, and any deviations must be authorized by the supervisor.

Factor 4. Complexity -- Level 4-1 -- 25 Points

The assignments consist of a few, limited, related duties. Because of the specific instructions provided and the limited variety of medical supply items handled, there is little choice involved in determining the work to be done. The procedures and guidelines to be followed are easily determined.

Factor 5. Scope and Effect -- Level 5-1 -- 25 Points

The work involves the performance of a few, limited duties required to process, prepare, and distribute medical supply items. The work also involves on-the-job training for additional and more complex duties. The work efforts have limited impact outside the medical supply unit. The primary effect of the work is to relieve experienced medical supply technicians of the simpler or more repetitive work.

Factor 6. Personal Contacts -- Level 6-1 -- 10 Points

The personal contacts are with other medical supply employees.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The personal contacts are to exchange factual information.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The work requires standing for most of the workday and frequent bending and reaching.

Factor 9. Work Environment -- Level 9-2 -- 20 Points

On a regular and recurring basis, the work involves moderate risks and discomforts such as exposure to dirty supply items and working near gas and steam sterilizers. The aide must comply with special safety and health precautions and wear protective clothing such as a cap and gown.

TOTAL POINTS -- 370

MEDICAL SUPPLY AIDE, GS-0662-03, BMK #1*Duties*

Rotates among the various duty assignments in a central medical supply operation, e.g., decontamination, instrument preparation, and storage and issue.

Decontaminates the full range of reusable medical supplies and equipment used within the wards and clinics of the facility. Uses selected methods for removing gross contamination. Disassembles and reassembles equipment where the internal parts have become contaminated. Operates various kinds of equipment such as ultrasonic cleaners and washer-sterilizers.

Prepares the full range of trays and sets used on the wards and in the clinics of the hospital. Removes trays of instruments from presterilizing equipment, inspects items to be sure that gross contamination has been removed and that instruments function properly. Sorts the instruments by size and type, and reassembles trays and sets based on recognition of key items or inventory needs. Uses care in packing to protect points, cutting edges, and delicate instruments and to insure effective penetration of sterilizing medium. Receives instructions on obtaining a compact, logically arranged set.

Operates the various sterilizers, as directed. Periodically tests operation of equipment for effectiveness of sterilization.

Removes carts and packages from the sterilizers. Inspects packages for indications of proper sterilization. Aerates gas-sterilized packages for appropriate length of time. Labels items to show date of sterilization and shelf-life and stores the items on shelves. Fills requests for items based on daily schedules of needs or on individual requisitions. Reports to the supervisor items that are out of stock and discusses possible substitutions. Periodically inventories stock.

Factor 1. Knowledge Required by the Position -- Level 1-2 -- 200 Points

-- A practical knowledge of aseptic techniques and microbiology (germ theory, types of microorganisms, habitat and mode of life, thermal death point) sufficient to understand the ways diseases and infections are transmitted and the importance of clean and sterile supplies to patient care.

-- A knowledge of the flow of work in the central supply unit and the unit's relation to patient treatment and care.

-- The ability to recognize a wide variety of instruments and supplies and to discriminate among similar-appearing instruments that vary by small differences in size or differences such as in serrations, tips, and curvature of blades.

-- The ability to pursue further training in aseptic techniques relating to the care, use, and processing of new kinds of equipment or the effectiveness of new or revised cleaning and sterilizing methods.

Factor 2. Supervisory Controls -- Level 2-2 -- 125 Points

The official in charge of the central processing unit assigns the employee to various work areas staffed by senior employees who can provide instruction and review, as needed. New assignments are explained in detail and reviewed during progress and upon completion. Once new assignments are learned, the employee is expected to work independently except where difficulties are encountered. Senior employees are available to provide advice and suggestions on improved work methods.

Factor 3. Guidelines -- Level 3-1 -- 25 Points

Guidelines consist of publications on sterile supply operations, listings of the content of trays and sets, operating room and clinic schedules, manufacturers' catalogs and fact sheets on the various items, assembly and troubleshooting manuals, equipment operating instructions, and shelf-life guidelines.

The employee works in strict adherence to these guidelines. Any deviation must be approved by a senior technician to whom the employee is assigned.

Factor 4. Complexity -- Level 4-2 -- 75 Points

Assignments involve selecting the appropriate series of steps from several alternatives for the work area involved. For example, the employee selects a cleaning method based on the last known use, the appearance of the contamination, and the durability of the item; assembles large numbers of instruments and equipment for sets and places items based on size, weight, and delicacy of the instrument while striving for a compact, useful package that will permit effective penetration of the sterilizing medium; and loads items on sterilizer carts in appropriate manner based on workload, operating room schedules, and types of items returned for processing.

Duties require concentration and discernment to distinguish among instruments that differ only in small details.

Factor 5. Scope and Effect -- Level 5-2 -- 75 Points

The work involves the provision of sterile medical supplies to wards and clinics in medical facilities. The work directly affects the health of the patients.

Factor 6. Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with employees throughout the medical facility who use sterile supplies.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The purpose of the contacts is to receive requests for medical supplies, to clarify requests, to explain delays, and to provide advice concerning substitutes for supplies or functioning of equipment.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The employee usually stands and moves from one part of the room to another while performing duties. There is a frequent requirement for lifting baskets of stainless steel instruments weighing 25 pounds from floor level to chest level and occasional requirements for similarly lifting baskets weighing 50 pounds. Dexterity and strength are required in lifting wire baskets weighing ten pounds and positioning them on a conveyor system. The employee regularly pushes loaded carts weighing several hundred pounds, aligns them on tracks leading to automatic transport systems in sometimes crowded quarters, and works them over slight rises such as door sills.

Factor 9. Work Environment -- Level 9-2 -- 20 Points

On a regular and recurring basis, the employee alternates between a contaminated environment and a carefully controlled clean environment. In both, the employee wears special clothing, hair covers, and shoe covers which can be uncomfortably warm. While handling contaminated medical supplies, the employee also uses rubber gloves and an apron. The work area is often hot and humid. The employee is subject to slipping on wet floors. The employee must use padded gloves to remove carts from sterilizers and trays from the carts, and is subject to burns from accidentally touching hot items, to cuts from both sterile and contaminated instruments, and dermatitis from frequent contact with cleaning agents. The hazards of working around minute quantities of sterilizing gases are unknown. The employee often works around body fluids, mucus excretions, and bits of tissue, some of which may be foul smelling. Strong, unpleasant odors are encountered while sterilizing laboratory cultures prior to disposal. The work area is noisy due to the clatter of metal instruments, rumbling of carts, and operation of presterilizing equipment. Use of ultrasonic equipment may require use of ear protectors.

TOTAL POINTS -- 585

MEDICAL SUPPLY TECHNICIAN, GS-0622-04, BMK #1*Duties*

Performs a variety of duties in the medical supply issuing unit of a general medicine and surgery hospital.

Removes carts and packages from the sterilizers when the cycle is completed. Inspects packages for indications of proper sterilization. Aerates gas-sterilized packages for appropriate times. Labels items to show date of sterilization and shelf-life and stores the items on shelves. Fills

requests for items based on daily schedules of activities or on individual requisitions. Consults with requisitioners on items in short supply or out of stock, recommending possible substitutions. Sends requested items to wards and clinics via automated delivery systems. Periodically inventories stock. Maintains records on stock levels and recommends revisions in stock levels as the need for supplies changes.

Factor 1. Knowledge Required by the Position -- Level 1-2 -- 200 Points

- A basic knowledge of aseptic principles, microbiology, and medical procedures sufficient to understand the ways diseases and infections are transmitted, the importance of clean and sterile supplies to patient care, the general use of medical instruments and supplies, and the precautions necessary to maintain sterility of supplies.
- A knowledge of the flow of work in the central supply unit and the unit's relationship to patient treatment and care.
- The ability to recognize a wide variety of instruments and supplies and to discriminate among similar-appearing instruments that vary in size, color coding, and nomenclature.
- The ability to pursue training related to the care, use, and processing of new kinds of medical supplies and equipment.

Factor 2. Supervisory Controls -- Level 2-2 -- 125 Points

Supervision is provided by the official in charge of the medical supply operation who assigns duties on a continuing basis and reviews work through periodic observation of the work area and through discussions with the employee. The employee is expected to perform most duties independently except to consult with the supervisor on unusual problems that arise.

Factor 3. Guidelines -- Level 3-2 -- 125 Points

Guidelines consist of publications on sterile supply operations, operating room and clinic schedules, manufacturers' catalogs and fact sheets on the various items, equipment operating instructions, shelf-life guidelines, and inventory procedures.

The employee follows established guidelines, but is expected to use judgment in issuing items in short supply, in recommending the revision of stock levels, and in suggesting substitutes for unavailable items.

Factor 4. Complexity -- Level 4-2 -- 75 Points

Assignments consist of a series of steps involved in unloading sterilizers, inspecting packages for proper sterilization (inspecting indicator tapes, looking for damp muslin wrappings, improper seals), unpacking presterilized items and stocking shelves, and filling requisitions. The employee must decide among several readily discernable differences in items, differences in nomenclature between requisitions and stock items, and similar distinctions.

Factor 5. Scope and Effect -- Level 5-2 -- 75 Points

The work involves discrete segments of the overall work of the unit. The work product, consisting of filled requisitions, facilitates the work of other employees in the hospital in stocking cabinets, ward carts, and clinics.

Factor 6. Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with employees throughout the medical facility who use sterile supplies.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The purpose of contacts is to receive requests for medical supplies, to clarify requests, to explain delays, and to provide advice concerning substitutes for supplies or other supply resources.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The employee usually stands and moves from one part of the room to another while performing duties. There is a frequent requirement for lifting packages and bundles weighing 25 pounds from carts to storage shelves. The employee regularly pushes loaded carts weighing several hundred pounds, aligns them on tracks leading to automatic transport systems in sometimes crowded quarters, and works them over slight rises such as door sills.

Factor 9. Work Environment -- Level 9-2 -- 20 Points

On a regular and recurring basis, the employee normally works in a well-lighted, clean environment that is adequately climate controlled. The employee wears special clothing, hair covers, and shoe covers which can be uncomfortably warm. The employee uses insulated gloves to remove carts from sterilizers. The employee is subject to burns from accidentally touching hot items. The hazards of working around minute quantities of sterilizing gases are unknown. The work area is occasionally noisy due to the rumbling of carts.

TOTAL POINTS -- 685

MEDICAL SUPPLY TECHNICIAN, GS-0622-05, BMK #1*Duties*

Provides a wing of a medical and surgical hospital with a wide variety of medical supplies, equipment, and instrument trays and sets. The wing contains such clinics as hematology, dermatology, hemodialysis, pulmonary, gastrointestinal, and cardiac catheterization, along with ward areas for the patients. Anticipates needs through periodic inventory and discussion with

ward and clinic personnel, maintains stock levels, returns reusable supplies to the central processing area, and advises clinic and ward personnel on new or changed equipment and supplies, current medical supply resources, turnover time, proper use of equipment, and troubleshooting procedures.

Factor 1. Knowledge Required by the Position -- Level 1-4 -- 550 Points

-- An understanding of the basic principles of microbiology as they apply to medical supply operations, especially as they relate to the importance of clean and sterile supplies to the treatment and care of patients.

-- A thorough knowledge of aseptic principles and techniques including, cleaning techniques, sterilization mediums, tests to determine effectiveness of sterilization, and packaging, storage, and shelf-life characteristics.

-- A thorough familiarity with hospital and clinic layout, staffing, and operations and the integration of the sterile supply operation into the total health care program to adequately supply the hospital wing.

-- An awareness of the relative cost of the various items used in the wing to take necessary precautions with costly equipment.

-- A basic understanding of medical and surgical terminology, therapeutic procedures, and of human anatomy and physiology to understand supply requirements and to explain the availability of resources to medical personnel.

Factor 2. Supervisory Controls -- Level 2-2 -- 125 Points

The supervisor has established the parameters of the work assignment consisting of the hospital area involved, the general outline of the duties, and performance expectations. The employee is expected to independently discharge duties and responsibilities within this framework and to consult with the supervisor, who is generally available, on unusual problems or needs, such as the need to significantly revise stock levels of expensive items.

The supervisor reviews work through occasional observation of the work site, activity reports, and consultation with ward and clinic personnel.

Factor 3. Guidelines -- Level 3-2 -- 125 Points

Guidelines consist of publications on sterile supply operations listings of the content of trays or sets, clinic schedules, manufacturers' catalogs and fact sheets, assembly and troubleshooting manuals, equipment operating instructions, shelf-life guidelines, and oral instructions on the preference of various medical personnel concerning supplies.

In many cases guidelines are specific and permit no deviation, such as is the case with sterility expiration dates. Judgment and discretion are required, however, in such activities as establishing stock levels, interpreting troubleshooting manuals, or applying a knowledge of equipment resources to unanticipated ward or clinic activities.

Factor 4. Complexity -- Level 4-2 -- 75 Points

Numerous kinds of supplies and equipment needed for the various wards and clinics, obtaining the supplies, determining the satisfactory condition of supplies, and storing supplies in such a manner as to maintain cleanliness and sterility standards. Judgment and discretion are required in adequately storing supplies in limited space and in revising stock levels based on usage patterns, overall stock levels, and cost considerations.

Factor 5. Scope and Effect -- Level 5-2 -- 75 Points

The work involves the provision of readily available, clean and sterile medical supplies and equipment to wards and clinics. The work product directly affects the health of the patients of the facility.

Factor 6. Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with employees throughout the medical facility who use the supplies.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The purpose of the contacts is to receive requests for medical supplies, to clarify requests, to explain delays, and to provide advice concerning substitutes for supplies or functioning of equipment.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The work requires standing and walking during the entire workday, and frequent bending and lifting of supply packages (occasionally weighing as much as 25 pounds). The employee regularly pushes loaded carts weighing several hundred pounds, aligns them on tracks leading to automatic transport systems in sometimes crowded quarters, and works them over slight rises such as door sills.

Factor 9. Work Environment -- Level 9-1 -- 5 Points

The work is performed in a ward or clinic setting in which there are no unusual risks or discomforts to the employee.

TOTAL POINTS -- 1020

MEDICAL SUPPLY TECHNICIAN, GS-0622-05, BMK #2*Duties*

Rotates among the various duty assignments in the central medical supply organization. Assignments include decontamination, instrument preparation, equipment maintenance and supply, and storage and issue. Regularly serves as the senior or only employee on night and weekend duty.

Decontaminates the full range of reusable medical supplies and equipment used in the hospital's wards and clinics. Determines and uses the appropriate method for removing gross contamination. Disassembles and reassembles equipment where the internal parts may become contaminated. Operates various kinds of equipment such as ultrasonic cleaners and washer-sterilizers.

Prepares the full range of trays and sets used on the wards and in the clinics of the hospital. Removes trays of instruments from presterilizing equipment, inspects items to be sure that gross contamination has been removed and that instruments function properly. Sorts the instruments by size and type and reassembles trays and sets based on recognition of key items or inventory needs. Uses care in packing to protect points, cutting edges, and delicate instruments and to insure effective penetration of the sterilizing medium. Strives for a compact, useful arrangement.

Selects appropriate methods for sterilizing, balancing time constraints with possible detrimental effects of quicker methods. Periodically tests operation of equipment for effectiveness of sterilization.

Equipment duties consist of collecting used equipment, removing gross contamination by appropriate methods, disassembling, cleaning, and sterilizing component parts, testing the operation of equipment, obtaining needed repairs, preparing components for sterilization, storing clean and sterile equipment, issuing equipment, troubleshooting the equipment, and explaining the proper use of the equipment.

Maintains records on the use, issuance, stock levels, and maintenance of equipment.

Storage and issuing duties consist of removing items from sterilizers; inspecting packages for indications of proper sterilization; aerating packages, as needed; labeling items to show date of sterilization and shelf-life; and storing the items in such a way as to preserve the sterile condition. Fills requests for items based on daily schedules of needs or on individual requisitions. Suggests substitutions for items that are not available. Periodically inventories stock.

Factor 1. Knowledge Required by the Position -- Level 1-3 -- 350 Points

- Knowledge and skill to perform duties encompassing the complete work cycle required to decontaminate, prepare, sterilize, store, and issue the full range of medical supplies and equipment used in the hospital's wards and clinics.
- A practical knowledge of the physical characteristics and functioning of the supplies and equipment, the ability to detect small differences in such things as serrations, curvature of tips, and length of jaws.
- A thorough knowledge of aseptic techniques, supplies, and equipment, and the advantages and disadvantages of the various sterilizing mediums.
- A general knowledge of the relationship of medical supplies and equipment to ward and clinic medical procedures sufficient to determine that the condition of equipment renders it unsuitable for use or to suggest substitutions for unavailable supplies.

Factor 2. Supervisory Controls -- Level 2-3 -- 275 Points

The supervisor assigns the employee to various work areas and expects the employee to independently complete assignments. The employee consults with the supervisor on unusual problems that develop such as the need to borrow urgently needed supplies from other medical facilities.

While working on evening, night, or weekend shifts, supervisory assistance may not be available for unusual situations that arise and the employee will have to work out solutions in consultation with medical personnel.

The supervisor reviews work through observation of the work area and by means of feedback from the hospital staff who use the employee's services.

Factor 3. Guidelines -- Level 3-2 -- 125 Points

Guidelines consist of publications on sterile supply operations, listings of the content of trays or sets, operating and clinic schedules, manufacturers' catalogs and fact sheets on the various items, assembly and troubleshooting manuals, equipment operating instructions, shelf-life guidelines, and oral instructions on the preference of various medical personnel concerning supplies.

Guidelines permit no deviation from certain set procedures such as operation of sterilizers, content of sets (except when prescribed items are unavailable), and use of standard tests.

Judgment is required in such activities as the placement of instruments in trays or in deciding whether to break down already sterilized sets to obtain needed instruments or to offer substitutions.

Factor 4. Complexity -- Level 4-2 -- 75 Points

Assignments involve selecting the appropriate series of steps from several alternatives in each of the several different work areas. For example, the employee selects a cleaning method based on the last known use, the appearance of the contamination and the durability of the item; assembles large numbers of instruments and equipment for sets and places items based on size, weight, and delicacy of the instrument while striving for a compact, useful package that will permit effective penetration of the sterilizing medium; and loads items on sterilizer carts in appropriate manner based on workload, priorities, and types of items returned for processing.

The employee must exercise a great deal of concentration and discretion in distinguishing among instruments that differ only in small details.

Factor 5. Scope and Effect -- Level 5-2 -- 75 Points

The work involves the provision of sterile medical supplies to wards and clinics in medical facilities. The work product directly affects the health of medical patients.

Factor 6. Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with employees throughout the medical facility who use sterile supplies.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The purpose of contacts is to receive requests for medical supplies, to clarify requests, and to provide advice concerning substitutes for supplies or functioning of equipment.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The employee usually stands and moves from one part of the room to another while performing duties. There is a frequent requirement for lifting baskets of stainless steel instruments weighing 25 pounds from floor level to chest level and occasional requirements for similarly lifting baskets weighing 50 pounds. Dexterity and strength are required in lifting wire baskets weighing ten pounds and positioning them on a conveyor system. The employee regularly pushes loaded carts weighing several hundred pounds, aligns them on tracks leading to automatic transport systems in sometimes crowded quarters, and works them over slight rises such as door sills.

Factor 9. Work Environment -- Level 9-2 -- 20 Points

On a regular and recurring basis, the employee alternates between a contaminated environment and a carefully controlled clean environment. In both, the employee wears special clothing, hair covers, and shoe covers which can be uncomfortably warm. While handling contaminated medical supplies, the employee also uses rubber gloves and an apron. The work area is often hot and humid. The employee is subject to slipping on wet floors. The employee must use padded gloves to remove carts from sterilizers and trays from the carts, and is subject to burns from

accidentally touching hot items, to cuts from both sterile and contaminated instruments, and dermatitis from frequent contact with cleaning agents. The hazards of working around minute quantities of sterilizing gases are unknown. The employee often works around body fluids, mucus, excretions and bits of tissue, some of which may be foul smelling. Strong, unpleasant odors are encountered while sterilizing laboratory cultures prior to disposal. The work area is noisy due to the clatter of metal instruments, rumbling of carts, and operation of presterilizing equipment. Use of ultrasonic equipment may require use of ear protectors.

TOTAL POINTS -- 985

MEDICAL SUPPLY TECHNICIAN, GS-0622-06, BMK #1

Duties

Rotates among the various medical supply operations assignments in a medical and surgical facility requiring a complete range of medical supplies, instruments, and equipment.

Decontamination

- Receives, disassembles, and inspects for damage reusable medical supplies, instruments, and equipment.
- Determines correct method for presterilizing. Removes soil, blood, tissue fragments, body fluids, and other gross contaminants by wiping, soaking, rinsing, scrubbing, and use of ultrasonic equipment. Loads and operates presterilizers.
- Reassembles medical equipment, including such complex equipment as cell centrifuges, which require skilled, careful positioning of parts and the complete elimination of dust particles or lint from the chambers.
- Removes items from presterilizers and determines type of tray or set to assemble based on recognition of key items and the operating room and clinic schedules.
- Examines items to insure that gross contamination has been removed.
- Assembles sets and trays by selecting appropriate tray, lining it with a towel, and arranging instruments in the tray in the correct manner, e.g., hinged instruments in open position, ring-handled instruments on a spreader, heavy instruments on the bottom, delicate items prewrapped to prevent damage, blades and points properly covered. Strives for a compact, logically arranged package that will permit effective penetration of the sterilizing medium. Places devices in the tray, selects correct wrapping for the tray, and wraps and labels it.
- Selects correct sterilizing medium and cycles, and operates sterilizer.

- Aerates gas-sterilized items for correct period of time.
- Periodically monitors operation of sterilizer with prescribed tests.
- In emergencies, uses less than optimum techniques such as flash sterilizing or faster heat techniques which might tend to deteriorate the piece of equipment.

Supply

- Receives sterilized trays, sets, and equipment from the sterilizer, checks for effectiveness of sterilization (color change on marker tapes, dampness of the packages), places tags on sterilized material indicating date of sterilization and expiration date, and stocks shelves with sterilized material.
- Assembles and loads ward and operating room carts according to schedules, and fills special and emergency request for supplies.
- Advises medical personnel on availability of supplies, possible substitutes, and effective use of equipment.

Equipment

- Receives used and contaminated equipment such as bed frames, mattresses, and vacuum pumps. Disassembles equipment, removes gross contamination from the component parts, reassembles the equipment, and checks its functioning.
- Determines appropriate method for cleaning and sterilizing the equipment, operates sterilizers, and stores and issues the equipment.
- Advises medical personnel on the proper use of the equipment and on problems that arise in connection with its use.

In addition:

- Receives periodic training in such areas as the use and functioning of new medical supplies, instruments, and equipment; new or improved sterilization practices; and developments in microbiology, bacteriology, and therapeutic practices as they affect the sterile supply operation.
- Periodically inventories medical supplies and equipment, keeping records and determining reordering needs. Removes outdated material from shelves for resterilization.
- Provides training and orientation to medical personnel on sterile supply techniques and procedures.

Factor 1. Knowledge Required by the Position -- Level 1-4 -- 550 Points

- An understanding of the basic principles of microbiology as they apply to medical supply operations, especially as they relate to the resistance of microorganisms to external destructive agents such as heat, chemicals, and ionizing radiation.
- A thorough knowledge of aseptic principles and techniques including, characteristics of various types of detergents, cleaning techniques, sterilizing mediums, sterilizer operation; tests to determine effectiveness of sterilization, and packaging, storage, and shelf-life characteristics.
- A good working knowledge of the availability, economics, use, operation, maintenance, assembly, and disassembly of the full range of medical supplies, instruments, equipment and the specific cleaning, sterilizing, and storage requirements of each.
- A thorough familiarity with hospital and clinic layout, staffing, and operations and the integration of the sterile supply operation into the total health care program.
- A basic understanding of medical and surgical terminology, therapeutic procedures, and of human anatomy and physiology.

Factor 2. Supervisory Controls -- Level 2-3 -- 275 Points

The supervisor assigns the employee to various work areas and expects the employee to complete assignments independently. The employee consults with the supervisor on unusual problems that develop such as seeking urgently needed supplies from other medical facilities on a loan basis.

While working on evening, night, or weekend shifts, supervisory assistance may not be available for problems that arise and the employee is responsible for solving these problems in consultation with the medical staff of the hospital.

The supervisor reviews work through observation of the work area, through discussion with the employee, and by means of feedback from the hospital staff who use the employee's services.

Factor 3. Guidelines -- Level 3-2 -- 125 Points

Guidelines consist of publications on sterile supply operations, listings of the content of trays and sets, operating room and clinic schedules, manufacturers' catalogs and fact sheets on the various items, assembly and troubleshooting manuals, equipment operating instructions, shelf-life guidelines, and oral instructions on the preference of various medical personnel concerning supplies.

Guidelines permit no deviation from certain set procedures such as operation of sterilizers, content of sets (except when prescribed items are unavailable), and use of standard tests. Judgment is required in such activities as selecting presterilization cleaning methods and

sterilization mediums, placement of instruments in trays, and the substitution of items for missing supplies. Judgment based on past experience is required in resolving malfunctions in equipment. Prudence and experienced judgment are required in emergency situations where the employee must decide to use less desirable or more costly processing to make available urgently needed supplies.

Factor 4. Complexity -- Level 4-2 -- 75 Points

Assignments involve selecting the appropriate series of steps from several alternatives in each of the several different work areas. For example, the employee selects a cleaning method based on the last known use, the appearance of the contamination, and the durability of the item; assembles large numbers of instruments and equipment for sets and places items based on size, weight, and delicacy of the instrument while striving for a compact, useful package that will permit effective penetration of the sterilizing medium; and loads items on sterilizer carts in appropriate manner based on workload, priorities, and types of items returned for processing.

Concentration and discernment are required to distinguish among instruments that differ only in small details.

Factor 5. Scope and Effect -- Level 5-2 -- 75 Points

The work involves the provision of sterile medical supplies to wards, clinics, and operating rooms in medical facilities. The work product directly affects the health of medical and surgical patients.

Factor 6. Personal Contacts -- Level 6-2 -- 25 Points

Personal contacts are with employees throughout the medical facility who use sterile supplies and occasionally with similar kinds of employees in other medical facilities.

Factor 7. Purpose of Contacts -- Level 7-1 -- 20 Points

The purpose of the contacts is to receive requests for medical supplies, to clarify requests, to explain delays, and to provide advice concerning substitution for supplies or functioning of equipment.

Factor 8. Physical Demands -- Level 8-2 -- 20 Points

The employee usually stands and moves from one part of the room to another while performing duties. There is a frequent requirement for lifting baskets of stainless steel instruments weighing 25 pounds from floor level to chest level and occasional requirements for similarly lifting baskets weighing 50 pounds. Dexterity and strength are required in lifting wire baskets weighing ten pounds and positioning them on a conveyor system. The employee regularly pushes loaded carts weighing several hundred pounds, aligns them on tracks leading to automatic transport systems in sometimes crowded quarters, and works them over slight rises such as door sills.

Factor 9. Work Environment -- Level 9-2 -- 20 Points

On a regular and recurring basis, the employee alternates between a contaminated environment and a carefully controlled clean environment. In both, the employee wears special clothing, hair covers, and shoe covers which can be uncomfortably warm. While handling contaminated medical supplies, the employee also uses rubber gloves and an apron. The work area is often hot and humid. The employee is subject to slipping on wet floors. The employee must use padded gloves to remove carts from sterilizers and trays from the carts. The employee is subject to burns from accidentally touching hot items, to cuts from both sterile and contaminated instruments, and dermatitis from frequent contact with cleaning agents.

The employee often works around body fluids, mucus, excretions, and bits of tissue, some of which may be foul smelling. Strong, unpleasant odors are encountered while sterilizing laboratory cultures prior to disposal. The work area is noisy due to the clatter of metal instruments, rumbling of carts, and operation of presterilizing equipment. Use of ultrasonic equipment may require use of ear protectors.

TOTAL POINTS -- 1185