

# Position Classification Standard for Dental Hygiene Series, GS-0682

## Table of Contents

<b>SERIES DEFINITION.....</b>	<b>2</b>
<b>EXCLUSIONS.....</b>	<b>2</b>
<b>AUTHORIZED TITLES .....</b>	<b>2</b>
<b>OCCUPATIONAL INFORMATION.....</b>	<b>3</b>
<b>GRADING OF POSITIONS.....</b>	<b>6</b>
<b>GRADE CONVERSION TABLE .....</b>	<b>7</b>
<b>FACTOR LEVEL DESCRIPTION .....</b>	<b>8</b>
<b>FACTOR 1, KNOWLEDGE REQUIRED BY THE POSITION.....</b>	<b>8</b>
<b>FACTOR 2, SUPERVISORY CONTROLS.....</b>	<b>9</b>
<b>FACTOR 3, GUIDELINES.....</b>	<b>11</b>
<b>FACTOR 4, COMPLEXITY.....</b>	<b>12</b>
<b>FACTOR 5, SCOPE AND EFFECT .....</b>	<b>13</b>
<b>FACTOR 6, PERSONAL CONTACTS.....</b>	<b>14</b>
<b>FACTOR 7, PURPOSE OF CONTACTS .....</b>	<b>15</b>
<b>FACTOR 8, PHYSICAL DEMANDS .....</b>	<b>15</b>
<b>FACTOR 9, WORK ENVIRONMENT.....</b>	<b>16</b>
<b>OPM BENCHMARK DESCRIPTIONS .....</b>	<b>17</b>
<b>DENTAL HYGIENIST, GS-0692-04, BMK #1 .....</b>	<b>17</b>
<b>DENTAL HYGIENIST, GS-0682-05, BMK #1 .....</b>	<b>19</b>
<b>DENTAL HYGIENIST, GS-0682-06, BMK #1 .....</b>	<b>22</b>
<b>DENTAL HYGIENIST, GS-0682-07, BMK #1 .....</b>	<b>25</b>
<b>DENTAL HYGIENIST, GS-0682-08, BMK #1 .....</b>	<b>28</b>
<b>DENTAL HYGIENE SERIES EXPLANATORY MEMORANDUM.....</b>	<b>32</b>
<b>INTRODUCTION .....</b>	<b>32</b>
<b>COMMENTS RECEIVED ON THE TENTATIVE STANDARD.....</b>	<b>32</b>

## SERIES DEFINITION

This series includes positions the principal duties of which are to supervise or perform dental hygiene work including: oral prophylaxis, preliminary periodontal examinations involving diagnostic tests and x-rays, oral health education, preparation of treatment plans for plaque control, and application of topical fluorides and desensitizing agents to the teeth. Included in this series are positions concerned with planning, conducting, and evaluating preventive dental health programs for communities such as military installations and public health program areas. Positions in this series require a knowledge of the concepts, techniques, and procedures of dental hygiene.

This standard cancels and supersedes the classification standard for the Dental Hygiene Series, GS-0682, issued in February 1967; and the classification standard for the Public Health Dental Hygiene Series, GS-0684, issued in June 1963.

## EXCLUSIONS

The following kinds of positions are excluded from this series:

1. Positions involving the prevention, diagnosis, and treatment of oral disease, injuries, and deformities for which a doctorate degree in dentistry is required. For these positions refer to the [Dental Officer Series, GS-0680](#).
2. Positions which primarily involve responsibility for providing chairside assistance to a dentist during the treatment of patients and require knowledge and skill in the techniques and procedures of dental assisting. For these positions refer to the [Dental Assistant Series, GS-0681](#).
3. Positions which involve work primarily in the construction or repair of dental prosthetic appliances. For these positions refer to the [Dental Laboratory Aid and Technician Series, GS-0683](#).

## AUTHORIZED TITLES

The title of "Dental Hygienist" is authorized for all positions primarily involving work of a clinical nature, including positions assigned duties related to research, teaching, or the performance of dental hygiene expanded functions.

The title of "Community Health Dental Hygienist" is authorized for positions which are primarily nonclinical in nature and involve the planning, administration, and evaluation of preventive oral health programs.

Typically, supervision of dental hygienists is exercised by a dentist. Occasionally, a dental hygienist will have significant continuing supervisory responsibilities. Positions that meet the

definition of a supervisor as contained in the [General Schedule Supervisory Guide](#) should have the word "Supervisory" prefixed to the appropriate nonsupervisory title.

## **OCCUPATIONAL INFORMATION**

Dental hygienists are licensed dental auxiliaries who practice in under the general direction and supervision of a dentist. In the Federal Service, the majority of dental hygienists work in structured care settings, such as hospitals and outpatient clinics, providing clinical and educational services to meet the oral health needs of individuals and groups of patients. A few dental hygienists work in nonclinical settings assisting communities in planning and conducting dental health programs commensurate with the needs and resources of the community. Additionally, they serve as dental health advisors and consultants on public health matters.

In the past decade increased attention has been given to the development of multifaceted oral hygiene programs which are directed toward educating and treating patients in the context of "total health care" delivery. Currently, there is a growing recognition that a person's dental problems are not isolated ones. The successful prevention and treatment of dental disease must be interrelated with the person's physical, emotional, and social well-being. This trend has had a significant effect on the large proportion of dental hygienists in the Federal Service who are working in the area of hospital preventive dentistry. Most dental hygienists are spending more of their time planning dental hygiene treatment, assessing the special hygiene needs of patients, and conducting individual and group oral health education. With this increased emphasis on dental education and disease prevention the scope of dental hygiene work has expanded to include greater involvement with patients on an individual and group basis; not only in the traditional clinical setting but outside the clinic as well. Also, in recent years many States have permitted dental hygienists to perform dental procedures which historically have been the sole responsibility of the dentist. For example, in some situations, dental hygienists are performing duties such as root planing, soft tissue curettage, and administration of infiltration anesthetics under the direct supervision of the dentist. Some dental hygiene school curriculums and continuing education programs now include courses in expanded functions to properly prepare hygienists to assume expanded assignments in areas of clinical procedures and community dental health education.

### **Clinical Dental Hygienists**

Dental hygienists usually work alone in a treatment room designed to provide preventive, therapeutic and education services. Although they work under the general supervision of the dentist, hygienists frequently do not have their work assigned on a case by case basis except when carrying out therapeutic procedures under the direction of the dentist. They receive and screen patients, using their own judgment in deciding the suitability of performing prophylaxis and what precautionary measures are necessary. The results are generally reviewed when the dentist treats the patient.

Clinical hygienists perform work that involves direct patient care and often requires considerable patience and tact in obtaining cooperation from patients. Hygienists are required to use resourcefulness and originality to motivate patients and adapt hygiene techniques to the individual patient. Although not necessarily limited to the following they may perform:

*Patient examinations* including taking periapical, panoramic, bite wing, and occlusal X-rays; making preliminary examinations to screen for periodontal problems; observing and reporting oral conditions; examining mouth, throat, and pharynx; examining teeth for plaque index; observing and reporting symptoms of acute physical distress and reassuring apprehensive patients.

*Patient treatment, planning, and consultation* including interpreting routine X-rays for purposes of providing dental hygiene services; planning the sequence of dental hygiene procedures for appointments or series of appointments; reviewing patient medical and dental histories; preparing treatment plan for plaque control; planning and adapting diet for patients; and answering patient inquiries regarding use of nonprescription drugs, such as toothpaste and mouthwashes.

*Preventive service* including using ultrasonic devices and hand instruments to remove supra gingival and subgingival calculus, performing root planing, applying disclosing solutions to the teeth to identify plaque, applying fluoride to the teeth; cleaning interproximal surfaces of teeth using dental floss or tape, polishing coronal surfaces of the teeth; applying fluoride to the teeth, and performing oral prophylaxis on ambulatory and nonambulatory patients.

*Dental health education* including instructing patients in brushing and flossing techniques; teaching patients care of removal appliances and bridges, instructing patients in periodontic care, instructing patients in diet and nutrition as it relates to oral health, explaining etiology of caries and periodontal diseases to patients, giving oral habit therapy, providing patients with dental health education materials, and motivating patients to accept and follow dental care instructions and advice. Dental hygienists also instruct student dental hygienists, nurses, and nursing assistants in the technique and practices of oral hygiene and present lectures and demonstrations on oral healthy care.

*Surgically related procedures* such as removing sutures, placing periodontal packs, controlling bleeding by direct pressure, performing gingival curettage and giving instructions to patients after deep curettage, removing medications from dry sockets, and retracting oral tissues in surgical procedures.

*Administering anesthesia and medications* including local anesthesia, topical medications; desensitizing eroded areas of teeth, and dispensing nonprescription drugs such as fluoride gel and oral lubricants.

*Insertions and restorations* including smoothing enamel fractures; inserting and removing temporary fillings; polishing crowns; inserting and removing temporary crowns and bridges; irrigating and packing dry sockets; placing and carving amalgam restorations; preparing silicate, acrylic and plastic restorations.

*Adjustments and repairs* including smoothing and polishing restorations, cleaning and polishing removable appliances, inserting and removing complete or partial dentures, and reducing sharp edges of fractured teeth.

*Taking impressions* including selecting tray for impressions, preparing and mixing impression materials, placing impression material on teeth, removing impression from patient's mouth, and constructing custom impression trays.

*Medical and dental recordkeeping* including obtaining and recording patient's chief complaints; obtaining patient's past medical and dental history, history of family illnesses, and use of medications; assembling patient charts; recording oral conditions and results of periodontal examinations; recording progress and therapy notes; scheduling patient appointments; setting up and maintaining a patient recall system; and recording numbers of patients treated and types of treatment administered.

*Miscellaneous duties* including sterilizing and sharpening instruments, checking and maintaining instruments in working condition, cleaning treatment room and equipment after treatment, ordering and storing medical and dental supplies and equipment, and operating audiovisual equipment.

The overall functions and duties listed above represent the full range of clinical dental hygiene work. Rarely, will a dental hygienist in the Federal Service perform all of these duties. The specific responsibilities assigned to a hygienist within any given dental service may vary depending on the particular dental philosophy and delegation patterns of the dentist; the character of the patient population; the kind and extent of the dental hygienist's training and education. Such factors may serve as important considerations for the evaluation and design of dental hygiene positions.

### **Community Health Dental Hygienists**

Community health dental hygienists work primarily in nonclinical settings planning and carrying out dental health programs to promote public awareness, acceptance, and practice of oral health measures for groups of individuals and communities. In the Federal Service, most of these hygienists are located either on military installations or in areas serviced by public health programs. Typical duties include: planning and conducting oral health instructional programs directed toward the needs of various community groups, providing technical advice and assistance to dental personnel on public health matters relating to oral health, making onsite visits to provide policy guidance and insure conformance and consistency among areas in accomplishing the objectives of the dental health program, conducting surveys and special studies to evaluate the effectiveness of the oral health program and to recommend new or improved methods of disease prevention; planning and conducting dental inspection programs; developing teaching aids and materials including exhibits and displays used to stimulate behavioral change and improve the level of oral health in the community, presenting lectures and demonstrations in new techniques and developments and suggesting ways they may be integrated into existing programs; and preparing and compiling necessary administrative records

and reports such as those regarding participation in oral health programs and' recommendations for modifying or improving them.

Community health dental hygienists, in addition to possessing up-to-date knowledge of oral hygiene concepts and practices, must have knowledge of the basic concepts and methods of dental public health as applied in the planning, organization, and administration of community oral health programs. They must also possess a knowledge of educational principles and methods to develop dental instructional and training programs. Community health dental hygienists have broad responsibilities covering every aspect of the preventive program. The work requires frequent personal contact with a wide variety of groups and individuals such as family members, school officials and Parent Teacher Associations, social service agencies, local hospitals, other dental and medical personnel, community leaders and associations. In order to be effective in carrying out the preventive program hygienists must know the community or geographic area for which they are responsible including a determination of the oral health needs of the community population, the cultural and economic characteristics which affect oral health, and the resources available within the community.

Although community health dental hygienists usually work under the general supervision of chief dental officers they typically perform assignments independently with wide latitude for carrying out the preventive program. Their work is generally reviewed for accomplishment of project and program objectives, for consistency with agency and program policies, and for quality and contributions to improvements in the preventive dentistry program.

## GRADING OF POSITIONS

This standard provides grade evaluation criteria for nonsupervisory clinical dental hygiene positions only. These positions should be evaluated on a factor-by-factor basis, using one or more of the benchmarks or factor level descriptions for the Dental Hygiene Series, or both. The [Primary Standard](#) may be used to evaluate factor levels of positions that are not contained in this standard. Only the designated point values may be used. Additional instructions for evaluating positions are contained in [Introduction to the Position Classification Standards](#).

*Note:* Several benchmark descriptions in this standard contain terms (e.g. hospital, clinic, medical facility) which make references to the physical location of a dental hygiene position. These terms are meant to serve only as a relative frame of reference to reflect real jobs. The terms in and of themselves should not be used to justify matching a position to a particular benchmark. Regardless of its physical location, a dental hygiene position may be compared to a particular benchmark when the duties and responsibilities of the position are similar to those in the benchmark description.

This standard does not provide grade evaluation criteria for all types of dental hygiene positions. Other classification standards are to be used in evaluating the following types of positions:

1. Community health dental hygiene. In view of the very small number of positions in this specialization specific classification criteria have not been developed for

community health dental hygiene positions. These positions are to be evaluated by the extension of the grade level criteria in this standard, by cross series comparison to other classification standards, and by application of sound position classification judgment. Grade criteria provided for the evaluation of similar type positions in the [Nurse Series, GS-0610](#), and the [Dietitian and Nutritionist Series, GS-0630](#), may be used for making cross series comparisons. Work involving the, planning, development, and administration of the preventive oral health program and related advisory responsibilities may be evaluated by cross series comparison to the [Public Health Program Specialist Series, GS-0685](#). The classification of positions in this specialization may vary substantially due to differences in the oral health needs and socioeconomic characteristics of the community, the skills and resourcefulness required in planning and carrying out the preventive program, and the supervision and guidelines under which the work is performed.

2. Positions concerned with dental hygiene education and training. Nonsupervisory positions that involve as a primary responsibility providing training instruction to dental hygienists and oral health instructional programs should be evaluated by the [Grade Level Guide for Instructional Work](#).
3. Research grants positions. Dental hygiene positions that are primarily concerned with reviewing, evaluating, and recommending approval of research grants and contracts should be evaluated by references to the [Research Grants Grade-Evaluation Guide](#).
4. Supervisory positions. Supervisory positions are not typical in this series. The work is usually performed under the general supervision of a dentist. However, if a position does have significant continuing supervisory responsibilities, it should be evaluated in accordance with the [General Schedule Supervisory Guide](#).

## GRADE CONVERSION TABLE

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

GS Grade	Point Range
4	655-850
5	855-1100
6	1105-1350
7	1355-1600
8	1605-1850
9	1855-2100

## FACTOR LEVEL DESCRIPTION

### FACTOR 1, KNOWLEDGE REQUIRED BY THE POSITION

This factor measures the nature and extent of information of facts which the dental hygienist must understand to do acceptable work (e. g., steps, procedures, practices, rules, policies, principles, and concepts) and the nature and extent of 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 1-4 - 550 points*

- A knowledge of the basic dental hygiene sciences, the related clinical techniques and procedures, and the standard dental instruments and materials: to perform routine prophylactic treatment such as cleaning, scaling, and polishing the teeth; to examine teeth using appropriate dental instruments; and to provide basic oral health care instructions and educational services to patients.
- A knowledge of common oral diseases and abnormal conditions such as dental decay, gingivitis, Vincent's infection, abnormalities of tooth position, size and form, oral abscesses, abnormal growth, including their cause and effect on the patient's health, sufficient to recognize the presence of these conditions, explain their etiology to patients, provide the necessary prophylactic treatment, and educate patients in the prevention of tooth decay and inflammation of the gums.
- A knowledge of dental radiology including radiographic principles, intraoral and extraoral techniques, processing, exposure factors, radiation safety, and basic radiographic anatomy, in order to expose, process, and mount a variety of intraoral X-rays, to identify normal anatomic landmarks on X-rays, and to use these X-rays as aids in the treatment and education of the patient.
- A knowledge of dental office procedures and administrative practices for scheduling patient appointments, assembling patient records, taking and recording medical and dental histories, recording oral conditions of the teeth, and setting up and maintaining a recall appointment system.
- Skill in manipulating instruments and materials while performing basic prophylactic procedures.

or

- Equivalent knowledge and skill.



*Level 1-5 - 750 points*

In addition to knowledges described in Level 1-4:

- A knowledge of dental hygiene sciences such as oral dental anatomy, physiology, histology, periodontology, nutrition and pharmacology, microbiology, the principles and techniques of dental hygiene, and the dental instruments and materials, to perform a variety of specialized diagnostic, prophylactic, and preventive dental hygiene procedures. Examples include: performance of complete preliminary dental examinations; oral prophylaxis; including root planing and curettage under local anesthesia; polishing and finishing amalgam restorations; inserting temporary sedative fillings in teeth; placement and removal of periodontal packing.
- A knowledge of oral pathology such as diseases of the oral hard and soft tissues, disorders of tooth structure and development, congenital anomalies, disorders of the salivary glands, and infective and parasitic diseases, sufficient to recognize symptoms, understand the diseases processes, and determine proper referral or appropriate course of dental hygiene treatment.
- A knowledge of various medical diseases and disorders that occur in the oral cavity and alter standard prophylactic and therapeutic dental hygiene procedures. Examples include: patients with cancer of the head, neck, and chest area; diabetic patients; patients with a history or present condition of hepatitis; patients on dialysis; patients with blood disorders and heart disease; and patients with organ or limb transplants. At this level hygienists know their manifestations, understand the effects of related medications, and the effects of the diseases on the care and treatment of the teeth, in order to perform specialized prophylactic and therapeutic dental hygiene procedures and provide home care instructions to chronically ill patients.
- Skill in conducting individual or group oral health care instructions to motivate patients with special needs toward the practice of effective oral hygiene techniques.
- Skill and dexterity in manipulating a variety of instruments while performing specialized dental hygiene procedures.

or

- Equivalent knowledge and skill.

## **FACTOR 2, SUPERVISORY CONTROLS**

"Supervisory Controls" covers the nature and extent of direct or indirect controls exercised by the supervisor, the dental hygienist's responsibility, and the review of completed work. Controls are exercised by the supervisor in the way assignments are made, instructions are given to the hygienist, priorities and deadlines are set, and the objectives and boundaries are defined. Responsibility of the hygienist depends upon the extent to which the hygienist is expected to

develop the sequence and timing of the various aspects of the work, to modify or recommend modification of instructions, and to participate in establishing priorities and defining objectives. The degree of review of completed work depends upon the nature and extent of the review, e.g., close and detailed review of each phase of the assignment; detailed review of the finished assignment; spot check of finished work for accuracy, or review only for adherence to policy.

### *Level 2-1 - 25 points*

The dentist or higher graded dental hygienist selects assignments to limit the number and complexity of procedures or techniques to be performed. The supervisor provides specific detailed instructions and exercises close control over the assignment.

The hygienist performs the work as instructed and consults with the supervisor when complications or difficult situations arise.

Frequently, the work is observed during progress and checked at completion for technical accuracy and thoroughness.

### *Level 2-2 - 125 points*

The supervisor provides recurring assignments by indicating generally the number of patients to be treated, the quality of care expected, and the number and type of dental techniques and procedures which may be performed by the hygienist. The dentist will provide specific instructions for carrying out treatment procedures on patients requiring specialized care.

The hygienist uses initiative in carrying out most assignments independently without specific instructions or direct observation. Situations arising during treatment not previously encountered are referred to the supervisor for assistance.

Clinical work is generally reviewed for its quality and effectiveness during subsequent treatment by the dentist. Nonclinical work is usually evaluated to assure that it is consistent with the dental program objectives and methods, and in compliance with initial instructions given by the supervisor.

### *Level 2-3 - 275 points*

The supervisor assigns ongoing responsibility to the hygienist for coordinating and carrying out the preventive phase of the dental service in accordance with the set philosophy and objectives of the dental program.

Some dental hygienists at this level are assigned regular and continuing responsibility for providing special dental hygiene treatment and education to patients with acute or unusual oral problems.

The hygienist carries out the preventive phase of the program with relative freedom for exercising independent judgment and resourcefulness, develops instructional activities, provides appropriate dental hygiene treatment, and plans and carries out the training of other dental hygienists, dental assistants, and members of the nursing staff. The hygienist is responsible for coordinating the preventive services with other staff of the dental service and with members of organizations outside the service, e.g., medical staff and members of affiliated colleges and universities.

The results of the work are generally reviewed at completion for adherence to the policies and objectives of the dental service.

### **FACTOR 3, GUIDELINES**

This factor covers the nature of guidelines available to the dental hygienist and the judgment needed to apply these guidelines. Guides used include, for example: agency manuals and operating procedures, accepted techniques and procedures of dental hygiene, procedures and policies of the preventive dental program, standard textbooks, professional journals and literature, recognized ethics and principles of the dental profession, and written and oral instructions from dentists.

Individual jobs vary in the specificity, applicability, and availability of the guidelines for performance of assignments. Consequently, the constraints and judgmental demands placed upon dental hygienists also vary. For example, the existence of specific instructions or procedures may limit the opportunity of the hygienist to make or recommend decisions or actions. However, in the absence of procedures or under broadly stated objectives, hygienists in some jobs may use considerable judgment in developing resources and selecting approaches to effectively educate and motivate patients with various hygiene needs.

#### *Level 3-1 - 25 points*

Specific and detailed guidelines cover all aspects of the work assigned to the hygienist.

The hygienist works in strict adherence to the guidelines, referring situations requiring choice in the selection or application of the guidelines to the supervisor. An example of this level is the dental hygienist who performs basic, traditional dental hygiene procedures with instructions supplemented by the dentist.

#### *Level 3-2 - 125 Points*

Guidelines typically include agency manuals and operating procedures, accepted dental hygiene procedures and techniques, and established policies and practices of the dental care program. The hygienist is also guided by the ethics and principles of the dental profession and the standards established by the state dental practice acts.

The hygienist uses judgment in selecting and adapting the most appropriate guidelines and procedures to individual cases or problems. Situations requiring significant deviations from the guidelines are referred in the supervisor.

### *Level 3-3 - 275 Points*

Guidelines include formal agency policies and objectives governing activities of the dental health service, state and local regulations pertaining to accepted practices of dental hygiene, policy manuals of the professional associations, professional journals and dental health literature, and the recognized ethics of the field.

At this level, the dental service's standards and methods for delivery of preventive dental care lack specificity and, in some cases, require further development. The hygienist must use judgment and creativity to select, develop or adapt methods, technical procedures, and materials appropriate for the treatment and education of various patients and targeted groups. Also, at this level hygienists may make recommendations regarding new techniques or changes in the objectives of the preventive dental program and/or approaches to providing care.

## **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 4-2 - 75 points*

The work involves the performance of dental hygiene duties which require the completion of sequential steps, procedures, or techniques. The patients treated are characterized as having minor dental hygiene problems requiring the performance of routine dental hygiene procedures and techniques.

Decisions regarding what needs to be done depend upon factors such as slight variations in the condition of patients' teeth, drugs or other medical factors which may affect the approach to dental hygiene treatment, and the patients' attitudes toward oral health care.

The method and type of treatment rendered is the same in most cases. The work requires only minor adjustments in such things as communicating with the patient and obtaining their cooperation, the selection of dental instruments, the materials and techniques used, and the number of appointments necessary to complete work on the patient.

*Level 4-3 - 150 points*

The work involves the performance of a variety of specialized dental hygiene procedures, methods, and techniques. Patient treatment is usually lengthy, non-routine in nature, and frequently complicated by related medical and dental problems.

The hygienist must identify and analyze factors and conditions which are not readily apparent in order: to assess the extent of the patient's dental problem; to determine the best approach or course of dental hygiene treatment; to coordinate the patient's medical and dental hygiene treatment; and to choose from many alternatives, the appropriate dental instruments, materials, and techniques necessary to complete treatment in each case.

The methods of dental hygiene treatment, including the dental instruments, materials, and techniques used, vary with individual patients and patient groups. The hygienist is required to frequently alter standard methods of dental hygiene treatment and to provide close and careful follow-up to check progress and to insure coordination between medical and dental hygiene treatment.

**FACTOR 5, SCOPE AND EFFECT**

Scope and effect 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 organizations.

Effect measures such things as whether the work output facilitates the work of others, provides timely services of a personal nature, or impacts on the adequacy of research conclusions. The concept of 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 assignments are limited to the performance of tasks or procedures usually for the purpose of receiving training in a specific function of dental hygiene, e.g., dental hygiene education.

The work has a limited effect on services rendered to the patient.

*Level 5-2 - 75 points*

The purpose of the work is to provide specific dental hygiene treatment and educational services to patients. These services represent a significant segment of the total dental care program.

In addition to preparing patients for subsequent treatment by the dentist, completion and results of the work affect the attitude of patients toward maintaining good oral health.

*Level 5-3 - 150 points*

At this level, the purpose of the work is to plan and provide comprehensive dental hygiene treatment, and educational programs to meet the oral hygiene needs of various individuals and patient groups. The work recurrently involves treating patients with a variety of gum and related diseases typically requiring follow-up treatment. The assignments also include responsibility for planning instructional programs and development of materials for patients participating in the dental hygiene program.

The work directly affects the dental health and overall well-being of individual and groups of patients.

**FACTOR 6, PERSONAL CONTACTS**

This factor includes face-to-face contacts and telephone and radio dialogue 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 (e.g., the degree to which the employee and those contacted recognize their relative roles and authorities).

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 of 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 employees within the immediate organization, office, project or work unit, and in related or support units.

*Level 6-2 - 25 points*

Personal contacts may include patients in individual and group settings, medical and dental personnel, representatives of community organizations, school faculty members, and dental and medical professional associations. Contacts at this level normally occur on a regular basis and both parties generally have a mutual interest in community health and the prevention of medical and dental disease. The majority of dental hygiene positions are at this level.

## **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*

Personal contacts are primarily for the purpose of obtaining or giving information that is necessary for the accomplishment of the work. At this level patient contact is limited to scheduling appointments and obtaining factual information (e.g., type of prior dental treatment received). Frequently contacts with professional dental staff are for the purpose of relaying information concerning the effectiveness of certain dental techniques or materials, or for obtaining information concerning the performance of a dental hygiene procedure. This level is restricted to trainee dental hygiene positions and to those positions primarily involving the collection and exchange of dental hygiene information for research purposes.

### *Level 7-2 - 50 points*

Personal contacts are for the purpose of planning and coordinating dental hygiene treatment and educational services; motivating individual or groups of patients toward practicing effective oral health care techniques; presenting demonstrations in oral hygiene methods and procedures; advising patients on proper follow-up dental care, general diet, and nutrition; and instructing medical and dental personnel in methods and techniques of oral hygiene. Some dental hygienists work with faculty members from schools of dental hygiene planning course content and arranging clinical assignments for dental hygiene students.

### *Level 7-3 - 120 points*

At this level hygienists have regular and recurring contact with persons or groups who are unusually difficult to treat or communicate with because of problems such as deep rooted skepticism and fear, lack of self control, resistant behavior, or impediments in ability to understand or follow instructions. The hygienist is required to exercise skill in establishing rapport, gaining cooperation, and encouraging participation in the oral health program.

## **FACTOR 8, PHYSICAL DEMANDS**

The "Physical Demands" factor covers the requirements and physical demands placed on the employee by the work assignment. This includes physical characteristics and abilities (e.g., specific agility and dexterity requirements) and the 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 must also be considered, e.g. a job

requiring prolonged standing involves more physical exertion than a job requiring intermittent standing.

*Level 8-1 - 5 points*

At this level much of the hygienist's work is sedentary but may also require some walking, standing, reaching, bending, and the carrying of light dental educational materials and oral health aids such as floss, toothbrushes, and fluorides. The work includes few treatment procedures and requires no special physical demands.

*Level 8-2 - 20 points*

The work requires regular and recurring bending, stretching, and reaching during the treatment of patients. The hygienist may be required to stand or sit for prolonged periods of time at chairside. This level is also appropriate for dental hygiene positions requiring above average dexterity in the manipulation of dental instruments while working in confined areas of the patient's mouth.

## **FACTOR 9, WORK ENVIRONMENT**

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

*Level 9-1 - 5 points*

The work environment presents normal working conditions typical of places such as offices or conference rooms. The work setting is generally free of danger or unusual discomforts. The hygienist may perform the work without having to wear special protective clothing or equipment.

*Level 9-2 - 20 points*

The work environment involves risks typically associated with the performance of clinical dental hygiene procedures. The hygienist is regularly exposed to the hazards of radiation and such things as contagious diseases, infections, burns, and flying dental debris. The hygienist may wear protective clothing and equipment such as a lead shield, surgical gloves and mask, and eyeglasses.



## **OPM BENCHMARK DESCRIPTIONS**

### **DENTAL HYGIENIST, GS-0692-04, BMK #1**

#### *Duties*

This position is specifically designed to provide entry level dental hygienists with initial assignments to enhance their skills in performing prophylactic procedures, in educating patients in practices of oral health, and in becoming familiar with the work situation and philosophy of the dental service.

- Under close supervision of the dentist, performs prophylactic procedures consisting of scaling the teeth with hand and mechanized instruments to remove supra gingival and subgingival, calculus, polishing the teeth, and applying topical fluorides and desensitizing agents. Operates suctioning equipment; irrigates oral cavity; and inserts and removes cotton rolls from the mouth.
- Examines patient's oral cavity and records conditions of the teeth and oral structures. Reports evidence of disease or abnormalities such as cavities to the dentist. Treats common dental disease such as gingivitis under instructions from dentist.
- Instructs patients at chairside in brushing and flossing techniques; bridge care; care of dental prosthodontic appliances, and the common causes of tooth decay using disclosing tablets, dental floss, teeth models and visual aids.
- Assists higher graded dental hygienists in carrying out the preventive dentistry program; screens patients for participation in the program; designs oral health displays; instructs groups of patients in gum massage, toothbrush and flossing techniques; and answers patients inquiries regarding nonprescription drugs, e.g., toothpaste and mouthwash.
- Exposes and develops intraoral and extraoral X-rays. Mounts, labels and selects X-rays for viewing.
- Performs recordkeeping procedures: schedules patient appointments, assembles dental record for incoming patients, records patient's medical and dental history and use of medications, and records number of patients treated and type of treatment administered. Orders and stores medical and dental supplies.
- Maintains dental instruments and equipment in clean and operative condition; sharpens hand instruments and sterilizes them using one or more methods of sterilization.

#### *Factor 1, Knowledge Required by the Position - Level 1-4 - 550 Points*

- Knowledge of the basic principles and techniques of dental hygiene, and the dental instruments, materials, and procedures necessary to perform routine oral examinations and basic prophylaxis; apply desensitizing agents; instruct patients in oral health care techniques; and keep dental instruments and equipment in operative condition.
- Knowledge of basic oral anatomy and histology such as the classification, forms and functions of the teeth and surrounding tissues in order to conduct clinical examinations of teeth; perform routine prophylactic procedures; and take and interpret dental X-rays for presence of calculus.

- Knowledge of common oral diseases and abnormal conditions such as infections and inflammations of the gum and tooth decay, sufficient to recognize their presence in the oral cavity, provide routine prophylactic treatment, and make appropriate referrals to the dentist.
- Knowledge of recordkeeping procedures and administrative practices of the dental service in order to schedule patient appointments, report conditions of the teeth, record patient's treatment, and set up and maintain a recall appointment system.
- Knowledge and skill in performing prophylactic procedures.

*Factor 2, Supervisory Controls - Level 2-1 - 25 points*

The dentist screens patients for the hygienist during an initial examination. Patients are selected who have common dental problems and will allow time for the hygienist to develop skill in using the instruments and communicating with the patient during treatment.

The dentist is available for advice or assistance at any time during the treatment phase. The hygienist performs prophylaxes on patients having minor dental problems according to instructions from the dentist. Directions for performing duties during group sessions with patients are provided by a higher graded dental hygienist.

The dentist reviews the work at completion of treatment for thoroughness and to correct any deficiencies.

*Factor 3, Guidelines - Level 3-1 - 25 points*

Guidelines include approved techniques and procedures of oral hygiene, oral instructions from the dentist regarding appropriate choice and effective use of dental hygiene procedures, and standard operating policies and administrative procedures of the clinic.

The hygienist is assigned patients who have been screened by the dentist to provide training and development of skill in applying traditional techniques of dental hygiene. Unusual or unexpected problems uncovered while working on the patient are referred to the dentist.

*Factor 4, Complexity - Level 4-2 - 75 points*

The treatment and education of the patient are related service and performed jointly in one or more visits to the clinic. The amount of time spent on treating and educating the patient varies with the dental problems and needs of each patient. In addition to recognizing and treating minor dental hygiene problems the hygienist is also responsible for deciding on an effective approach for motivating patients to practice good oral hygiene.

*Factor 5, Scope and Effect - Level 5-1 - 25 points*

The purpose of the position is to provide training to the dental hygienist in the performance of basic prophylactic procedures and oral health education techniques. The work has a limited impact on the activities of the dental service.

*Factor 6, Personal Contact - Level 6-2 - 25 points*

Contacts are primarily with ambulatory adult patients and with other employees throughout the dental services.

*Factor 7, Purpose of Contacts - Level 7-1 - 20 points*

Contacts with patients are primarily for the purpose of giving or obtaining medical and dental information. The hygienist may obtain the patient's chief complaint, schedule patient appointments, demonstrate flossing and brushing techniques, and explain each procedure to the patient during the course of treatment. Contacts with other employees in the dental service are for the purpose of exchanging information and obtaining dental materials necessary to complete the treatment of the patient.

*Factor 8, Physical Demands - Level 8-2 - 20 points*

Long periods of standing, recurring bending and reaching are required during performance of prophylactic procedures.

*Factor 9, Work Environment - Level 9-2 - 20 points*

Work involves risk of exposure to radiation, communicable diseases and unpleasant odors. The hygienist uses a lead shield for protection against radiation and normally wears gloves and face mask while working on patients.

**TOTAL POINTS – 785**

**DENTAL HYGIENIST, GS-0682-05, BMK #1***Duties*

Serves as a dental hygienist responsible for administering oral prophylaxis, treating abnormal gum conditions, and instructing patients in oral health care.

- Performs complete oral prophylaxis including the following: seats and drapes patients; applies disclosing solution to the teeth; performs supra gingival and subgingival scaling using cavitron and scaler to remove calculus deposits, accretions, and stains; polishes teeth using bristle brushes, rubber cups, polishing strips, and prophylactic paste; and

applies topical fluorides and other anticariogenic agents. Cleans and polishes removable dental appliances worn by patients.

- Examines patient's oral cavity including the mouth, throat, and pharynx, and records conditions of the teeth and surrounding tissues. Refers patients to the dentist who have abnormalities such as cavities, defective fillings, suspicious growths, or periodontal disease. Applies desensitizing agents and other topical agents to treat abnormalities such as gingivitis and Vincent's infection.
- Instructs patients, individually and in groups, in proper oral hygiene care using materials such as teeth models, displays, slides, toothbrushes, dental floss, disclosing tablets, mirrors, and phase microscope. Demonstrates proper techniques of brushing, flossing, and use of necessary perio aids and explains the common causes of tooth decay and its relationship to general diet. Instructs patients on the care of removable dental appliances. Instructs nurses and nursing assistants in oral health care techniques for bedridden, handicapped, disabled, and chronically ill patients.
- Takes, develops, and mounts oral X-rays including bite wing, panoramic and periapical: Interprets X-rays to determine areas of calculus deposits and periodontal involvement, the relationship of the teeth, etc. Selects and arranges X-rays as teaching devices for viewing by patients.
- Records the number of patients treated and type of treatment administered. Checks and maintains instruments to insure working condition. Cleans, sharpens, and sterilizes instruments.

*Factor 1, Knowledge Required by the Position - Level 1-4 - 550 points*

- Knowledge of dental and oral anatomy, oral physiology, oral histology, radiology and nutrition, the principles and techniques of preventive dentistry, and the instruments and materials to perform procedures including prophylaxis, examinations of the oral cavity, taking and interpreting X-rays for presence of calculus, and providing oral health care instructions to patients and the nursing staff.
- Knowledge of common oral diseases and abnormal conditions such as gingivitis, Vincent's infection, and tooth decay, sufficient to recognize the presence of these conditions, provide routine prophylactic treatment, and make appropriate referrals to the dentist.
- Skill in providing individual and group instruction to assist patients in understanding the cause and prevention of dental disease and to motivate patients toward the practice of good oral health care.
- Skill and dexterity in performing prophylactic procedures.

*Factor 2, Supervisory Controls - Level 2-2 - 125 points*

The chief of the dental service indicates the number of patients to be scheduled and the kind of treatment expected. Dentists occasionally refer patients to the hygienist for treatment of abnormalities. For these situations the hygienist is given specific instructions regarding the treatment prescribed. The staff periodontist provides instruction on new and improved dental hygiene techniques.

The hygienist performs prophylactic procedures and patient education independently without specific instructions. The hygienist is responsible for identifying abnormalities and referring them to the appropriate staff member of the dental service.

Procedures are usually performed without direct supervision or observation. Work is generally reviewed for its quality and effectiveness during subsequent treatment by the dentist.

*Factor 3, Guidelines - Level 3-2 - 125 points*

Guidelines consist of the traditional procedures covering techniques and use of instruments and materials used in dental hygiene, clinic operating procedures and policies, and current publications in preventive dentistry.

The hygienist uses judgment in selecting the most appropriate instruments and other materials to be used in the treatment of patients.

*Factor 4, Complexity - Level 4-2 - 75 points*

Assignments consist of patient examinations, oral prophylaxis, and patient education which are phases of the oral health process and may require several appointments before treatment can be completed by the hygienist.

The hygienist must integrate the patient education with the treatment procedures in order to achieve effective results. Some patients, such as stroke and cardiac patients, require taking special precautionary measures prior to and after treatment. For example, certain cardiac patients must be premedicated in order to prevent infection; during treatment the hygienist must watch for signs (e.g., excess bleeding) which may require altering or ceasing dental hygiene work.

The method and type of treatment rendered is the same for most patients. Variations in the work is limited to making only minor adjustments in the way the hygienist communicates with the patient, the length of time required for treatment, and the choice of dental instruments and materials used.

*Factor 5, Scope and Effect - Level 5-2 - 75 points*

The services provided by the dental hygienist facilitate the work of dentists and affect the attitudes of patients towards maintaining good dental health practices.

*Factor 6, Personal Contacts - Level 6-2 - 25 points*

Personal contacts are with patients, nurses and nursing assistants, and members of the dental service.

*Factor 7, Purpose of Contacts - Level 7-2 - 50 points*

Contacts with the staff of the dental service are primarily for purposes of exchanging information and coordinating the treatment of the patient. Contacts with nursing services are for providing instruction in oral hygiene methods for bedridden patients and for exchanging patient information. The purpose of patient contact is to provide services, exchange information, demonstrate techniques of oral hygiene, reassure patients, and motivate patients to practice oral health care measures. Family members are contacted in cases where patients are unable to care for themselves.

*Factor 8, Physical Demands - Level 8-2 - 20 points*

Long periods of standing, reaching, and bending are required to perform intraoral procedures.

*Factor 9, Work Environment - Level 9-2 - 20 points*

Work requires use of surgical mask, gloves, and eyeglasses. There is danger of exposure to radiation and communicable diseases.

**TOTAL POINTS - 1065**

**DENTAL HYGIENIST, GS-0682-06, BMK #1***Duties*

Serves as a dental hygienist responsible for providing routine and advanced prophylactic and therapeutic dental care to postsurgical and periodontal patients.

- Upon referral from the dentist, examines patients' teeth and surrounding tissues to determine extent of abnormal condition requiring treatment. Records a history of each patient to determine if systemic conditions are present which may alter standard treatment. Plans dental hygiene treatment and series of appointments in accordance with existing conditions.
- Performs oral prophylaxis and provides therapeutic care in cases of acute gingivitis and periodontal disease using a variety of scaler and ultrasound equipment. Applies prescribed medications to gums in cases of excess bleeding. When necessary, under the direction and supervision of the dentist performs deep scaling, root planing and subgingival curettage; takes intraoral impressions for the preparation of study models, smooths and polishes rough edges of restorations; places temporary fillings, administers local anesthesia; and places and removes rubber dams.
- In cases of periodontal surgery performs dressing removal, suture removal, irrigation, and dressing application. Provides therapeutic instruction to patient in the home care phase of treatment adapting instructions, oral hygiene aids and techniques to the individual situation. Teaches patients specialized techniques such as use of interproximal brushes, bridge threaders, and disclosing agents.

- Sets up and maintains a patient recall system to insure continuous, close follow-up treatment for each patient involved in the dental program. Provides instructions using demonstrations and audiovisual aids in the use and care of dental prosthesis, nutritional guidance, and need for daily hygiene care to prevent further dental disease and infections.
- Takes, develops and interprets intraoral and extraoral X-rays to determine areas of calculus deposits and periodontal involvement. Selects and arranges X-rays for special use in educating and motivating the patient.
- Provides dental hygiene instruction and training to other dental service personnel and participates in dental staff meetings and programs.

*Factor 1, Knowledge Required by the Position - Level 1-5 - 750 Points*

- Knowledge of dental hygiene sciences such as oral anatomy, histology, nutrition, and pharmacology, the principles and techniques of dental hygiene, and the dental instruments and materials to perform specialized prophylactic and preventive dental hygiene procedures including deep scaling, root planing, and subgingival curettage.
- Knowledge of oral pathology and periodontology sufficient to identify a variety of abnormal conditions such as acute gingivitis, periodontitis, and periodontal pockets, and provide the necessary prophylactic and therapeutic dental hygiene treatment.
- Knowledge of systemic diseases such as diabetes sufficient to recognize their manifestations, understand the disease processes, determine proper course of dental hygiene treatment, and to provide the specialized oral care and follow-up instructions.
- Knowledge of dental radiology including radiographic principles, intraoral and extraoral techniques, processing, exposure factors and radiation safety, sufficient to take, process, and mount a variety of X-rays, and to use them as aids in performing dental hygiene treatment and educating patients.
- Skill and dexterity in manipulating a variety of dental instruments while performing specialized prophylactic and therapeutic dental hygiene procedures.

*Factor 2, Supervisory Controls - Level 2-2 - 125 points*

General supervision is provided by the chief of the dental clinic. Patients are referred by staff dentists who provide technical direction to the hygienist. The hygienist is responsible for performing most prophylactic procedures, patient education, and home care instructions without direct supervision. Procedures which may have serious consequences for patients such as deep periodontal scaling and curettage are performed under the specific directions of the dentist.

Complications arising during treatment are referred to the dentist.

The work is generally reviewed for its quality and effectiveness during subsequent treatment by the dentist.

*Factor 3, Guidelines - Level 3-2 - 125 points*

Guidelines include operating policies and practices of the dental service, accepted dental hygiene materials, procedures, and techniques and dental hygiene publications.

The hygienist uses judgment in selecting and adapting techniques, procedures, and materials most appropriate for treating the specific problems of each patient. Situations requiring significant deviations from the guidelines are referred to the dentist.

*Factor 4, Complexity - Level 4-3 - 150 points*

The work involves the performance of a variety of specialized dental hygiene procedures.

Most of the patients treated have periodontal problems, systemic diseases, or other conditions which alter standard dental hygiene treatment. For example, postsurgical patients often require instruction on the use and care of dental prosthesis. Thorough prophylactic treatment is given to prevent further tooth loss and nutritional guidance is essential for the prevention of dental disease. Regular follow-up is required to assure adequate functioning of the special prosthesis. In most cases the work must be planned and tailored to the patients' individual needs.

Treatment may be altered in situations where the patient is highly susceptible to secondary infection, has a low trauma threshold or is experiencing extreme physical discomfort.

*Factor 5, Scope and Effect - Level 5-2 - 75 points*

The scope of the work is limited by the specificity of the prophylactic procedures and therapeutic care provided to meet the individual patient needs.

Completion of the work is essential to comprehensive treatment of the patient and enables the dentist to restore or maintain the patient's mouth in satisfactory condition.

*Factor 6, Personal Contacts - Level 6-2 - 25 points*

Contacts are with patients, their families and other staff members of the dental service.

*Factor 7, Purpose of Contacts - Level 7-2 50 points*

Contact with the professional dental staff is for the purpose of planning and coordinating the treatment of the patient. The hygienist provides educational instruction to other dental hygienists and assistants in the dental service. The purpose of patient contact is to provide treatment, give instructions and nutritional guidance, and motivate patients to practice daily oral hygiene care. Family members are given instructions in cases where patients are unable to care for themselves or need assistance.



*Factor 8, Physical Demands - Level 8-2 - 20 points*

Long periods of sitting and recurring bending and reaching are required while performing dental hygiene procedures. The hygienist must also demonstrate above average dexterity in manipulating dental instruments and materials.

*Factor 9, Work Environment - Level 9-2 - 20 points*

Work involves regular and recurring exposure to the hazards of radiation and communicable diseases. The hygienist uses a lead shield for protection against radiation and frequently wears face mask and surgical gloves during the performance of clinical procedures.

**TOTAL POINTS - 1340**

**DENTAL HYGIENIST, GS-0682-07, BMK #1***Duties*

Serves as a dental hygienist responsible for performing advanced prophylactic and preventive dental procedures in the treatment of patients with related medical and dental problems.

- Completes preliminary dental examinations on new dental service patients. The hygienist reviews patient's medical and dental history for evidences of past and present conditions such as medical illnesses and use of drugs which may complicate or alter dental hygiene treatment; examines the teeth and surrounding tissues for evidences of plaque and periodontal disease and charts findings; inspects the mouth and throat for evidence of disease such as oral cancer; interprets routine X-rays to identify tooth structures, calculus, and abnormalities such as cavities and deep periodontal pockets. Refers abnormalities such as cavities, traumatic occlusion, and suspicious lesions to the dentist. Prepares dental hygiene treatment plans for patient including assessment of the problem, type of oral hygiene care required, and the sequence of appointments needed to complete treatment.
- Performs a complete oral prophylaxis on ambulatory and nonambulatory patients. Performs deep subgingival scaling, root planing, and curettage under local anesthesia. Polishes the teeth and applies stannous fluoride for hypersensitivity and caries prevention. Gives home care instructions to patients after curettage. Provides bedside prophylactic treatment using specialized procedures for comatose patients, neurosurgical patients, and other types of nonambulatory patients.
- In postoperative care of oral surgery and periodontal surgery patients, performs suture removal, changes dressings, applies topical anesthetics, and provides home care instructions. In oral cancer patients, takes impressions for construction of mouth guards, applies fluoride using tray technique, and maintains recall system for careful follow-up of each patient. Educates patient on need for daily oral health and fluoride treatment.

- Assists the dentist by making repairs and adjustments to the teeth by smoothing rough edges of restorations, removing overhanging margins of fillings, reducing sharp edges of fractured teeth, polishing and finishing amalgam restorations, and inserting temporary fillings in teeth.
- Instructs patients at chairside in oral hygiene, brushing and flossing techniques, and periodontal aids which increase the amount of stimulation to the teeth. Plans and adapts instructions in home care techniques, tailoring them to the oral hygiene needs and oral problems of individual patients. Explains to patients the causes of periodontal disease and tooth decay, and the importance of diet as it relates to oral and systemic health.
- Regularly instructs nurses and nursing assistants in the proper techniques of oral hygiene to be applied to the bedridden, handicapped, disabled and chronically ill patient. Presents lectures and demonstrations in oral health care to various patient groups such as diabetics, hemodialysis patients, and drug or alcohol dependent patients, using slides denture models, tooth-brushes, charts, and other dental education materials.
- Exposes, develops and processes radiographs on patients including bite wing, periapical and panoramic X-rays. Adjusts voltage, amperage, and timing of X-ray equipment. Selects type of radiograph that will be necessary for patient's mouth. Positions film and machine to insure coverage of area to be X-Raced. Mounts and labels X-rays.
- Maintains patient's record of treatment. Records oral conditions of the teeth and surrounding tissues, progress and therapy notes, appointments, and the number of patients treated and type of treatment administered.

*Factor 1, Knowledge Required by the Position - Level 1-5 - 750 points*

- Knowledge of oral anatomy, oral physiology and histology, the principles and techniques of preventive dentistry, and the dental instruments and materials to perform a variety of specialized prophylactic and preventive dental hygiene procedures including root planing and curettage.
- Knowledge of oral pathology and periodontology sufficient to recognize a variety of abnormal conditions such as acute gingivitis, periodontitis, and deep periodontal pockets, and provide the necessary prophylactic and therapeutic dental hygiene treatment.
- Knowledge of medical diseases such as cancer, diabetes, and heart disease as they relate to the care and treatment of the teeth in order to perform bedside prophylaxis, and provide therapeutic dental hygiene procedures and home care instruction to patients.
- Skill in providing individual and group oral health care instructions to patients and the nursing staff in order to motivate patients with special needs toward the practice of effective oral hygiene techniques.
- Skill in performing specialized prophylactic and preventive dental hygiene procedures.

*Factor 2, Supervisory Controls - Level 2-3 - 275 Points*

General supervision is provided by the chief of the dental service who establishes the objectives and philosophy of the dental program.

The hygienist is responsible for planning and carrying out dental hygiene treatment and oral health education to whatever depth is considered necessary depending on the individual needs and progress of the patient. Keeping within the objectives of the dental program, the hygienist

independently coordinates with medical and other hospital personnel the treatment of individual patients. Clinical procedures are performed independently without direct observation by the dentist. The dentist will provide added instructions and technical assistance when needed during the performance of surgically related hygiene procedures such as subgingival curettage.

The work is reviewed for its conformance to the objectives and policies of the dental service.

*Factor 3, Guidelines - Level 3-2 - 125 points*

Guidelines consist of established dental hygiene procedures, instruments, and education techniques. These guides are supplemented by verbal instructions and written manuals governing the work of the dental service.

The hygienist uses judgment in selecting instruments and in determining the type and length of hygiene treatment appropriate for individual patients. Situations requiring significant deviations from the guidelines are referred to the dentist.

*Factor 4, Complexity - Level 4-3 - 150 points*

The work requires the performance of a variety of advanced and specialized prophylactic and preventive dental hygiene procedures. The treatment is complicated by patients having additional medical and dental problems.

The hygienist decides what kind of dental hygiene treatment and oral health instructions are necessary according to the medical and dental needs of individual patients. For example, cancer patients who receive radiation to the head and neck areas are treated under a special control program administered by the hygienist. The hygienist takes impressions for the construction of casts from which a custom-fitted tray for the teeth is made. The tray is packed with fluoride gel and applied to the teeth to prevent the breakdown of teeth structures typically caused by the radiation.

The hygienist must look for mouth sores, dryness and tenderness that may require special rinses, and for any signs of cavities developing that may require treatment. Regular follow-up treatment and home care instructions are also necessary.

*Factor 5, Scope and Effect - Level 5-3 - 150 points*

The work involves responsibility for treating patients throughout the medical facility using a variety of standard and specialized dental hygiene procedures. The hygienist also assists in planning and independently conducting educational programs in oral health for different types of patients and instructs nurses and nursing assistants in oral health care techniques for the bedridden patients.

The work directly affects the dental health and overall well-being of patients in the medical facility.

*Factor 6, Personal Contacts - Level 6-2 - 25 points*

Contacts are with patients throughout the medical facility, the nursing staff and other members of the dental service.

*Factor 7, Purpose of Contacts - Level 7-2 - 50 points*

Contacts are with patients, in groups and individually, for the purpose of motivating them to practice effective oral health care techniques; for planning and providing dental hygiene treatment; presenting demonstrations in oral hygiene; and for explaining the effects that medical disease and their treatment have on the oral cavity. Contacts with the nursing staff are for the purpose of coordinating patient treatment and scheduling group sessions. The hygienist also instructs nurses and nursing assistants in oral health care techniques for bedridden patients. Contacts with other staff members in the dental service are for the purpose of coordinating services and exchanging information.

*Factor 8, Physical Demands - Level 8-2 - 20 Points*

Work requires long periods of standing and recurring bending and reaching. The hygienist must also demonstrate above-average dexterity in manipulating sharp dental instruments.

*Factor 9, Work Environment - Level 9-2 - 20 points*

Work involves regular and recurring exposure to the hazards of radiation and communicable diseases. The hygienist uses a lead shield for protection against radiation and frequently wears face mask, eyeglasses, and surgical gloves during the performance of clinical procedures.

**TOTAL POINTS – 1565**

**DENTAL HYGIENIST, GS-0682-08, BMK #1**

*Duties*

Serves as a dental hygienist planning and administering a hospitalwide preventive dentistry program. The program is designed to provide comprehensive oral health education and dental hygiene treatment to diverse patient groups with assistance from members of the dental service and the nursing staff throughout the hospital.

- Plans, coordinates, and conducts preventive oral health programs for various patient groups such as diabetic, cancer, psychiatric, geriatric, alcoholic, and physical handicapped patients. Develops and revises oral health instructional materials and

education techniques for varied levels of the mental and physical capabilities of each patient group. Using resources available within the hospital and materials acquired from research, professional dental associations, and schools of dental hygiene, develops and presents oral health lectures, demonstrations, and visual displays to patient groups and hospital personnel. Develops procedural instructions to be used by dental hygienists, dental assistants, dietitians and nutritionists, and the nursing staff in the delivery of oral health care to patients throughout the hospital.

- Develops methods and carries out studies for evaluating the effectiveness of the preventive dentistry program. Modifies subject matter content and instructional methods according to the results of evaluation data and new developments in the field of dental hygiene. Compiles statistical data and written reports of the participation in the preventive dentistry program.
- In conjunction with the dental hygiene faculty of an affiliated college, plans and conducts a hospital program of academic and clinical instruction for dental hygiene students. Consults with the faculty in developing course content; conducts orientation classes for student dental hygienists; procures textbooks, manuals and audiovisual aids, schedules students on rotational work assignments at the hospital; instructs students in all phases of clinical and bedside oral care for hospital patients; gives lectures to students concerning various techniques of specialized oral care; and assigns course grades for students.
- Upon referral by staff dentists, administers oral prophylactic and dental hygiene treatment to patients presenting a variety of abnormal conditions. Administers local anesthesia under the close supervision of the dentist. Performs additional procedures such as: records medical and dental histories, reviews patients' dietary habits, administers caries prevention agents, desensitizes root surfaces, root planing, places temporary restorations, takes and pours impressions for study casts, removes sutures, and instructs the patients in home care therapy and proper diet as it relates to oral health.
- Carries out tests and reports on results of new dental hygiene products. Researches current dental literature and regularly attends hospital and dental staff meetings to make improvements in the oral hygiene program.

*Factor 1, Knowledge Required by the Position - Levels 1-5 - 750 points*

- Knowledge of the dental hygiene sciences including the principles, practices, and procedures of dental hygiene to conduct and coordinate with others the preventive dental health activities of the dental service; perform specialized oral hygiene care; develop instructional materials and guidelines for standardizing the delivery of preventive care; and instruct student dental hygienists in the various clinical procedures of hospital preventive dentistry.
- Knowledge of the hospital's medical and dental services, the characteristics and needs of the patient population, and the resources available in order to develop and carry out the preventive dentistry program.
- Skill in planning and presenting dental hygiene lectures, demonstrations and instruction using knowledge of dental hygiene sciences and practices including effective techniques of motivation and behavioral change.

*Factor 2, Supervisory Controls - Level 2-3 - 275 points*

The chief of the dental service assigns responsibility for planning and conducting the preventive dentistry program. The supervisor assists the hygienist in defining the objectives of the program and approves all plans designed to meet those objectives.

The hygienist carries out all work and collects data related to the preventive program under own initiative in accordance with accepted dental hygiene practices. Clinical procedures such as administering local anesthesia are performed under the observation and direction of the dentist.

Work is primarily reviewed for its conformity to the policies and objectives of the dental service.

*Factor 3, Guidelines - Level 3-3 - 275 Points*

Guidelines include agency policies, operating policies and objectives of the dental service, dental hygiene standards, written research materials and publications of professional associations and societies.

The hygienist selects, adapts, and, in some cases, develops teaching methods and materials which are judged to be most effective for different audiences. The hygienist must stay abreast of the latest material pertinent to hospital dentistry and new techniques and materials used in the field of dental hygiene.

*Factor 4, Complexity - Level 4-3 - 150 points*

The work consists of clinical and nonclinical duties requiring the performance of varied educational and therapeutic dental hygiene procedures and techniques. The educational oral health program is directed to the needs of all types of patients in the hospital.

The hygienist must tailor teaching methods and materials to the diverse needs of patients groups and hospital personnel responsible for patient care.

The work requires an assessment of the oral health needs throughout the hospital, and the identification of patients and personnel who should participate in the preventive dentistry program.

*Factor 5, Scope and Effect - Level 5-3 - 150 points*

The work involves planning and administering a preventive dentistry program to meet the oral health needs of various target groups throughout the hospital.

The preventive program is a major service offered by the dental service. Its effective operation has a direct impact on the oral health and general care of patients.

*Factor 6, Personal Contacts - Level 6-2 - 25 points*

Personal contacts are with patients, staff members of the dental service, dietetic service, the nursing staff, faculty members from schools of dental hygiene, and members of dental professional societies.

*Factor 7, Purpose of Contacts - Level 7-2 - 50 points*

Contacts with the dental staff and nursing personnel are for the purposes of obtaining cooperation and encouraging participation in the preventive dentistry program, making arrangements for group sessions, and planning new dental hygiene services. Contacts with patients are for the purposes of determining and assessing dental hygiene needs, providing hygiene treatment, and for motivating patients toward the goals of the oral health program. The hygienist works with faculty members and student dental hygienists in arranging student schedules, developing educational materials, and providing instructions in hospital dentistry.

*Factor 8, Physical Demands - Level 8-2 - 20 points*

Work requires long periods of sitting, recurring bending and reaching during clinical procedures. Above-average dexterity is also required in presenting demonstrations of oral hygiene techniques and in manipulating instruments.

*Factor 9, Work Environment - Level 9-2 - 20 points*

The work is most often performed in the hospital's ward and clinic areas. The hygienist is regularly exposed to communicable diseases and frequently wears surgical masks, gloves, and eyeglasses while performing clinical work.

**TOTAL POINTS – 1715**

## DENTAL HYGIENE SERIES EXPLANATORY MEMORANDUM

This memorandum is published to provide interpretive/explanatory information regarding the contents of the standard to which it pertains. The memorandum does not cite or contain evaluation criteria. Explanatory Memoranda provide background information intended to help users of standards to better understand and apply the contents of the standards and to explain the standards to employees and managers.

### INTRODUCTION

The Tentative Classification Standard for the Dental Hygiene Series, GS-0682, was distributed for comments and suggestions in April 1981. Five Federal departments and agencies, employee unions, two professional associations, and seventy-three individuals were invited to furnish comments and recommendations. This analysis contains information concerning the comments and suggestions received and the changes made to the tentative standard as a result of these comments.

### COMMENTS RECEIVED ON THE TENTATIVE STANDARD

Comments were received from the five major using departments and agencies, one employee union, two professional associations, four OPM regions and offices, and one individual. In general, responses to the proposed classification standard were highly favorable, and the reviewers had few major problems. We have carefully studied the comments and suggestions received and have used them wherever possible in the preparation of the final standard. We appreciate the evidence of close study of the proposed standard and the effort put forth by the various participants in the test evaluation, and comment process. Listed below, by subject area in order of appearance in the standard, are the major suggestions commentary, and actions taken.

#### A. SERIES DEFINITION AND COVERAGE

##### *Suggestion*

The majority of commenters (those representing the agencies' headquarter views were among them) generally agreed with merging community health dental hygiene positions with the Dental Hygiene Series, GS-0682. Several commenters (representing field installations of one major user), however, suggested keeping two separate occupational series for clinical and community health dental hygiene positions.

##### *Response*

Most of the information received during the development and review of the draft standard fully supported the consolidation of the GS-0682 and GS-0684 series. Commenters indicated that real differences which exist in the work and qualifications between clinical and community health dental hygiene were appropriately treated in the draft. From a broad



perspective, consolidation of community health and clinical type work in the draft was consistent with the way such work is currently treated in other medical occupations, such as the Nurse Series and the Dietitian and Nutritionist Series.

## **B. EXCLUSIONS**

### *Suggestion*

Exclusion number one should be revised to make it clear that a dental hygienist and dentist could be providing some of the same kinds of treatments but that some preventive services require a doctorate degree in dentistry and should be excluded from the Dental Hygiene Series.

### *Response*

Appropriate modification was made to the exclusion statement.

## **C. OCCUPATIONAL INFORMATION**

### *Suggestion*

Several commenters recommended additional duties for inclusion in this section of the standard.

### *Response*

Duties such as root planing, applying sealants to the teeth and polishing coronal surfaces of the teeth, have been included as part of the preventive services performed by dental hygienists.

### *Suggestion*

Some commenters suggested deleting from this section and the grading criteria portion of the standard, duties not traditionally performed by dental hygienists (e. g., administration of local anesthesia, taking impressions, placing temporary fillings).

### *Response*

The inclusion of these duties (commonly referred to as expanded functions) was determined to be appropriate. Although there is no full acceptance by the occupational community regarding the performance of these procedures, most reviewers supported their inclusion in the standard. Comments indicated that in some situations in the Federal Service, dental hygienists are delegated these procedures by the dentist and some dental hygiene schools offer regular courses and training in the performance of expanded functions. Additionally, duties such as the administration of local anesthesia and placing temporary fillings were previously included in the GS-0682 standard issued in 1967. Although Federal installations are not obligated to comply with the regulations of state dental practice acts, approximately 10 states currently allow dental hygienists to perform such procedures.

*Suggestion*

Recommendations were received to clarify use of occupational terminology.

*Response*

Various changes were made in this section and other portions of the standard to clarify occupational terminology. For example, references to "tin gel" were revised to read as "fluoride gel" and "oral lube" was changed to "oral lubricants".

**D. FACTOR LEVEL DESCRIPTIONS***1. Factor 1, Knowledge Required by the Position**Level 1-4, Suggestion*

Some commenters suggested deleting references to treatment of decayed teeth in applying knowledges of common oral diseases and abnormal conditions since this is treatment which only a dentist is licensed to perform.

*Response*

Modifications in wording were made to clarify the dental hygienist's involvement in applying this level of knowledge and to prevent possible misinterpretations by personnel and management officials.

*2. Factor 6, Personal Contacts**Level 6-2, Suggestion*

One commenter suggested revising factor level 6-2 to state clearly that any of the groups listed as personal contacts would support this level.

*Response*

The factor level was revised as suggested.

*3. General Commentary Relating to Factor Level Descriptions**Suggestion*

Many commenters suggested that references (in the FLD's and throughout the standard) to "treatment planning", "performing specialized preventive dental procedures", and "interpreting dental X-rays" be modified to clearly distinguish between work typically performed by dental hygienists and that performed by dental officers.

*Response*

Revisions were made throughout the standard to clearly specify that all work (e.g., taking and interpreting X-rays, and planning treatment) is for the purpose of performing dental hygiene procedures.

## **E. BENCHMARK DESCRIPTIONS**

### *Suggestion*

Many commenters recommended deleting references to the location of a dental hygiene position (e.g., outpatient clinic, hospital) in the introductory portions of the benchmarks. Although the standard specifically mentions that the "terms in and of themselves should not be used to justify matching a position to a particular benchmark", the very presence of such terms can and will probably lead to confusion among personnel officials and could be interpreted as restrictive.

### *Response*

As recommended, references to the location of dental hygiene positions were deleted from the benchmarks wherever possible.

### *Suggestion*

Several commenters pointed out that a technical error common to all benchmarks occurred in Factor 9, Work Environment. The draft states that "the hygienist uses a lead badge for protection against radiation." Commenters recommending modifying the factor to correctly read that the hygienist used a lead shield for protection against radiation and a film badge to detect exposure to radiation.

### *Response*

Revisions to the benchmark descriptions were made as suggested.