

## QUALITY EVALUATION FOR DENTAL CARE

Guidelines for the Assessment of Clinical Quality and Professional Performance

# **Guidelines**

# for the

# **Assessment of Clinical Quality**

and

**Professional Performance** 

©Copyright 1995 by The California Dental Association. All rights reserved Printed in the United States of America

THIS DOCUMENT MUST BE CONSIDERED IN ITS ENTIRETY AND NO SUMMARY OR ABRIDGEMENT OF THIS REPORT SHALL BE PERMITTED UNLESS FIRST REVIEWED AND APPROVED BY THE CALIFORNIA DENTAL ASSOCIATION

California Dental Association P.O. Box 13749 Sacramento, California 95853

Version 7.0

## TABLE OF CONTENTS

Preface	
Introduction	1
Terminology	2
General Guidelines	3
Rating System for Quality Evaluation	4
Quality Evaluation Criteria and Abbreviations	5
Rules for Examination and Rating	<i>6</i>
Analysis of Quality-Evaluation Data	
History and Clinical Examination	1
General Guidelines	
Rating System for History and Clinical Examination	
Quality Evaluation Criteria for History and Clinical Examination	
Radiographs	2
General Guidelines	2-1
Rating System for Radiographs	2-3
Quality Evaluation Criteria for Radiographs	2-4
Diagnosis	
General Guidelines	
Rating System for Diagnosis	
Quality Evaluation Criteria for Diagnosis	3-3
Treatment Plan	
General Guidelines	
Rating System for Treatment Plan	
Quality Evaluation Criteria for Treatment Plan	
Management of Pain, Anxiety and Emergencies	
General Guidelines	
Rating System for Management of Pain, Anxiety and Emergencies  Quality Evaluation Criteria for Management of Pain, Anxiety and Emergencies	
Preventive Dentistry  General Guidelines	
Rating System for Preventive Dentistry	
Quality Evaluation Criteria for Preventive Dentistry	
Endodontics	7
General Guidelines	
Rating System for Endodontics	
Quality Evaluation Criteria for Endodontics	

## TABLE OF CONTENTS

Endodontics Clinical Worksheet	7-6
Periodontics	8
General Guidelines	
Rating System for Periodontics	
Quality Evaluation Criteria for Periodontics	
Periodontics Clinical Worksheet	
Oral and Maxillofacial Surgery	9
General Guidelines	
Rating System for Oral and Maxillofacial Surgery	
Quality Evaluation Criteria for Oral and Maxillofacial Surgery	9-4
Oral Surgery Clinical Worksheet	
Operative Dentistry	10
General Guidelines	
Rating System for Operative Dentistry	10-3
Quality Evaluation Criteria for Operative Dentistry	
Operative Dentistry Clinical Worksheet	
Crowns and Fixed Partial Prosthodontics for Restoration of Dental Implants	s11
General Guidelines	
Fixed Prosthodontics, Veneers, Crowns and Fixed Bridges	12
General Guidelines	12-1
Rating System for Crowns and Fixed Partial Prosthodontics	
Quality Evaluation Criteria for Crowns and Fixed Partial Prosthodontics	
Crowns and Fixed Prosthodontics Clinical Worksheet	
Removable Partial Prosthodontics	13
General Guidelines	
Rating System for Removable Partial Prosthodontics	
Quality Evaluation Criteria for Removable Partial Prosthodontics	
Removable Partial Prosthodontics Clinical Worksheet	13-5
Complete Denture Prosthodontics	14
General Guidelines	14-1
Rating System for Complete Denture Prosthodontics	14-3
Quality Evaluation Criteria for Complete Denture Prosthodontics	14-4
Complete Denture Prosthodontics Clinical Worksheet	14-5
Removable Complete and Partial Prosthodontics for the Restoration of Dent	
General Guidelines	15-1
Pediatric Dentistry	
General Guidelines	
Rating System for Pediatric Dentistry	
Ouality Evaluation Criteria for Pediatric Dentistry	

## TABLE OF CONTENTS

Orthodontics	17
General Guidelines	17-1
Rating System for Orthodontics	
Quality Evaluation Criteria for Orthodontics	
Orthodontics Clinical Worksheet	
Dental Implants	18
General Guidelines	18-1
Rating System for Root-Form Dental Implants	18-5
Quality Evaluation Criteria for Root-Form Dental Implants	
Immediate Loading of Implants and Immediate Placement of Implants	18-7
Implant and Implant Prosthodontics Clinical Worksheet	
TMJ - MPD	19
General Guidelines	19-1
Evaluation	19-1
Diagnosis	19-2
Treatment Modalities	19-2
Addendum	19-3
Bibliography	

## **Preface**

Concern for the quality of its service constitutes the very heart of a profession's responsibility to the public; and the more expertise required to perform the service, the greater is society's dependence upon those who carry it out. Acceptance of this responsibility was evidenced in the approval by the 1973 House of Delegates of the California Dental Association of a resolution "... to establish a task force to define the standards of quality of dental care and the necessary measures or procedures which shall be utilized by any agencies who participate in a dental quality-control program..."

The directive of the House of Delegates was implemented by Dr. Burton H. Press, then president of the association, by appointing the chairman for the task force and convening a special planning committee whose purpose was to impart specific assignments to the task force. On July 14, 1973, the planning committee met and determined that there should be three committees in the task force, each with a specific area of responsibility. They would be: a Committee on Standards of Clinical Quality and Assessment of Professional Performance, to develop criteria and a rating system to be used in assessing clinical quality; a Committee on Implementation of Mechanisms of Quality Assurance, to explore new methods of monitoring clinical performance and to evaluate various peer review mechanisms; and a Committee on Standards of Program Design to Assure the Quality of Care, to develop criteria and standards of program design so that group purchasers of dental care might be guided in selecting the best possible program for their participating members.

The planning committee provided a multitude of names and qualifications of individuals to be considered for membership on the task force and directed that the chairman of the task force, in consultation with the association president, choose and appoint personnel to serve on the committees of the task force; six members for each of the three committees. The planning committee additionally directed that there be a coordinating committee composed of the general chairman of the task force, the president and the president-elect of the association, and the three chairmen of the committees. The function of the coordinating committee would be to coordinate the activities of the committees and to assemble the final reports of all three committees for the presentation to the Board of Trustees of the association.

Eighteen individuals were selected for membership based upon their expertise and experience in the specific areas of contemplated study. A composition of dental educators; dental program administrators; representatives of the state and federal governments, both on professional and non-professional levels; and dentists with varied practice experiences produced a compatible group representative of the dental profession and of the public which it serves.

From September of 1973 to April of 1974, the three special committees of the task force worked separately and in concert, searching for a system, studying various dental care programs, investigating existing peer review mechanisms and quality-assessment systems, and studying the legalities involved. A report was delivered to the Board of Trustees, to be forwarded to the 1974 House of Delegates, in which it was stated that "... a well-considered, broadly based set of criteria and evaluation techniques would be of substantial help to the existing peer review mechanism in California and would provide a uniformity heretofore unrealized..."

The task force had developed a format for the assessment of clinical quality and professional performance to serve as a baseline for future development in concert with general practitioners, specialty groups, component societies and other interested parties. A format was developed for program standards together with initial outlines of service priorities, program audits, and programs for consumer education. A pilot project was proposed to determine the feasibility of computer applications to quality evaluation as a first level screening mechanism for peer review.

It was recommended that the task-force approach be continued to complete the assignments utilizing the developed format.

Continuance of the effort was assured by resolution of the 1974 House of Delegates "... to pursue the study to completion, seeking input from all appropriate related groups ..." and the approval of "... a feasibility study by the Board of Trustees and possible implementation of a pilot project on computer support for quality evaluation ..."

The task force was immediately reappointed by Dr. William E. Schiefer, then president of the association, and intensified activities were commenced. All component dental societies were contacted through their dental care chairmen, peer review chairmen, and component presidents and the specialty organizations through their presidents. Contact with the health insurance industry, service corporations, and trust funds was established. The special committees of the task force met on a bi-weekly basis, receiving personal testimony from interested individuals and studying the copious written statements received from the contacted organizations and individuals. Public hearings were held at which the entire membership of the association was given the opportunity to provide data useful to the deliberations of the task force. This intensive level of communication produced the input vital to the completion of the two-year task force effort.

To the 1975 House of Delegates of the California Dental Association was presented a document unprecedented in scope and content, in which a profession accepted its responsibility to guide the public which it serves to better dental care, to set down the criteria by which it will eventually determine the standards for its own delivery of that care and re-affirm the profession's method of self-evaluation and self-government.

On May 31, 1975, the House of Delegates approved the *Guidelines for the Assessment of Clinical Quality and Professional Performance* and the *Standards for Program Design to Assure the Quality of Care* and in agreement with the recommendation of the Task Force on Quality Evaluation, adopted the following resolution:

RESOLVED, THAT THE CDA HOUSE OF DELEGATES APPROVE THE APPOINTMENT OF A COMMITTEE DIRECTLY RESPONSIBLE TO THE BOARD OF TRUSTEES TO FIELD TEST AND UPDATE THE GUIDELINES FOR THE ASSESSMENT OF CLINICAL QUALITY AND PROFESSIONAL PERFORMANCE, AND REVIEW THE STANDARDS FOR PROGRAM DESIGN IN ORDER THAT THEY CONTINUE TO REFLECT CURRENT CONCEPTS OF DENTAL PRACTICE; THE MAJORITY OF THE COMMITTEE TO BE COMPOSED OF PRACTICING DENTISTS.

On June 1, 1975, CDA President Dr. B.C. Kingsbury, Jr. appointed the Ad Hoc Committee on Quality Assurance, immediately implementing the resolution of the House of Delegates and providing the encouragement and the personnel necessary to produce this first edition of the manual *Guidelines for the Assessment of Clinical Quality and Professional Performance*.

The information contained in this manual warrants careful study, with the knowledge that this manual will undergo continual revision, for it must be considered a "living document" in order that it may continue to reflect current and future progress in the practice of dentistry.

The Association wishes to express its gratitude to the selfless and dedicated individuals who have served on the committees whose hours of labor have produced this manual. They are:

Dr. Daniel F. Gordon, Chairman

Mr. Robert Caffrey Dr. Gordon Cook

Dr. Ronald G. DeVincenzi Dr. Sidney R. Francis Dr. Winston Frenzel Dr. Jay W. Friedman Dr. Martin Garron Dr. John Gibson Dr. Theodore Grant

Mr. Thomas Heerhartz Dr. Robert John

Dr. B. C. Kingsbury, Jr.

Dr. Henry Lucas, Jr.

Dr. Dennis Nokelby Dr. Burton Press

Dr. Dale Redig

Mrs. Lucille Ricker

Dr. Lincoln Riley

Dr. Gunnar Ryge

Dr. Allan L. Sander

Dr. William E. Schiefer

Dr. Terry Slaughter

Dr. Robert L. Taylor

Dr. Gerald Vale

Dr. Eugene P. Wagner

Mr. John Wallis

Dr. Roman Ziolkow

## Introduction

The Task Force on Quality Evaluation has given top priority to developing an evaluation mechanism for those procedures most commonly performed in dentistry. The guidelines, sometimes referred to herein as criteria, are designed to be applied to evaluating the clinical quality and professional performance of a procedure, without regard to whether the dentist is a general practitioner or a specialist. Due consideration must always be given to various treatment modalities used by different practitioners. These guidelines do not, in and of themselves, represent standards. Such standards can only be determined after such time as substantial field testing is completed and analyzed.

Those procedures performed primarily, or only, by specialists, require further attention by the appropriate specialty group. Presently, evaluation of the performance of such procedures is being undertaken on a case-by-case basis by the various specialty peer review committees. It is hoped that rating systems and quality-evaluation criteria based on the current format will be developed by the appropriate specialty societies.

The guidelines contained in this manual reflect a broad consensus based on contributions of members of the task force and many other general dental practitioners and specialists. Nonetheless, it must be acknowledged that any such document must itself be amendable to revision and expansion as more experience is gained with its use.

These guidelines are not intended to represent the legal standard of care for practicing dentists on a statewide or local basis. Nor is any reference to a procedure which is "not acceptable" to be deemed malpractice under existing California law. Rather, these guidelines are designed to serve as an aid for quality evaluation by the review system of the California Dental Association. Thus, it is not intended that any procedure referred to hereinafter as "not acceptable" constitutes negligence and malpractice, under existing California law. In determining negligence and malpractice, other factors should be considered, such as the pre-existing state of the patient's medical and dental condition, the patient's cooperation at the time the dental care is rendered and in following suggested standards of care in oral hygiene programs, the patient's return to his dentist on a regular basis for maintenance of care rendered, complications occurring during the procedure which are normal and recognized risks of the dental care being performed, and other exigent conditions or complications. That is, it is not intended that these guidelines modify or alter the existing state of the law in California in regards to malpractice or negligence.

## **Terminology**

Separate sections have presently been developed for 19 dental service categories or care components.

History and Clinical Examination Crowns and Fixed Partial Prosthodontics for

Restorations of Dental Implants

Radiographs

Fixed Prosthodontics Veneers, Crowns and

Diagnosis Fixed Bridges

Treatment Plan Removable Partial Prosthodontics

Management of Pain, Anxiety, and Complete Denture Prosthodontics

Emergencies

Removable Complete and Partial Preventive Dentistry Prosthodontics for the Restoration of Dental

Orthodontics

TMJ - MPD

Implants Endodontics

Pediatric Dentistry

Periodontics

Oral and Maxillofacial Surgery

Dental Implants
Operative Dentistry

Each section has three basic components. They are:

a) general guidelines

b) rating system for quality evaluation

c) quality evaluation criteria and abbreviations

## **General Guidelines**

The general guidelines for each dental service category or care component review definitions, purposes, special considerations and rules that are pertinent to the assessment of clinical quality and/or professional performance for each dental service category or care component for which assessment is deemed useful and desirable.

In assessing dental treatment for a patient, it is imperative that consideration be given to the psychologic, physiologic and biologic factors present at the inception of treatment, as well as the direct cooperation of the patient, as evidenced following treatment by their level of home care and level of responsibility.

## **Rating System for Quality Evaluation**

The rating system for each dental service category or care component provides the rationale for the rating of clinical quality and/or professional performance into two main categories: **SATISFACTORY** vs. **NOT ACCEPTABLE**. Two sub-ratings are available within each main category:

## **Satisfactory:**

- **(R) ROMEO** -- indicates clinical quality and/or professional performance rated in the range of excellence.
- (S) SIERRA -- indicates clinical quality and/or professional performance rated in the range of acceptability.

## **Not Acceptable:**

- indicates clinical quality and/or professional performance which SHOULD be repeated, replaced, repaired or corrected for preventive reasons and is likely to cause future damage to the patient's general or dental health, or to individual components of the patient's masticatory system.
- (V) VICTOR -- indicates clinical quality and/or professional performance that MUST be repeated, replaced and/or immediately treated because damage is now occurring or because serious inadequacies exist.

The four sub-ratings are based upon the four main operational decisions that every dentist must make in order to provide appropriate care to each individual patient and to decide whether existing dental care services are **SATISFACTORY** or **NOT ACCEPTABLE**.

Rating of clinical quality and/or professional performance should not be confused with the grading of dental services on a "numerical scale" or on a "letter scale" with numerical equivalents (such as grading in educational institutions). In order to avoid such confusion, the call words and code letters which have been chosen for each rating category have no relationship to existing educational grading systems. It is recognized that the rating system delineates the existence of "ranges" as opposed to "exacts" and stresses the importance of the "judgment factor" in individual instances.

## **Quality Evaluation Criteria** and **Abbreviations**

The quality evaluation criteria and abbreviations are the means by which the assessment of clinical quality and/or professional performance is accomplished. Abbreviations reflect the main concept of their corresponding criteria and are used in communication between the examiner/evaluator and the recorder to prevent any unintentional interference in an existing doctor/patient relationship. *Quality Evaluation Criteria* spell out most of the commonly considered characteristics of **SATISFACTORY** vs. **NOT ACCEPTABLE** qualities of individual dental care services and should be considered merely as aids for the discrimination between the four sub-ratings for each characteristic. The determination of the rating of any given dental care service is dependent upon the sound judgment of the peer review examiners.

## **Rules for Examination and Rating**

The quality evaluation document contains 19 dental service categories which represent all of the disciplines of dentistry. Several of these service categories, namely: History and Clinical Examination, Radiographs, Diagnosis, Treatment Plan, and the Management of Pain, Anxiety and Emergencies, define characteristics that are common to all of the disciplines. Therefore, an assessment of quality of treatment in the disciplines requires application of the common characteristics defined in the foregoing service categories. History and Clinical Examination, Radiographs, Diagnosis, Treatment Plan, and Management of Pain, Anxiety and Emergencies characteristics peculiar to each service specialty will be included in the *General Guidelines* for that specialty.

The following rules will be applicable to quality evaluation:

- 1. An uneven number of dentists (minimum three) will make independent evaluations.
- 2. Each dentist will evaluate each characteristic (see the specific quality-evaluation criteria).
- 3. The characteristic with the lowest rating determines the category.
- 4. If a sub-rating is other than **(R) ROMEO**, the abbreviation or abbreviations that indicate the criterion or criteria used must be recorded on the rating form.
- 5. If the majority of dentists agree on the sub-rating, the rating is considered final.
- 6. If there is disagreement on a rating, the dentists will re-examine the treatment aspect under consideration and arrive at a joint decision.

Quality Evaluation Forms have been developed to provide a format for the recording of pertinent identification of the patient and the service to be assessed, with space for ratings and space for abbreviations for the criteria used.

Use of rating systems and criteria requires training and standardization of examiners in order to achieve uniform interpretation of the criteria.

## **Analysis of Quality-Evaluation Data**

Standards of Quality can only be determined after considerable field testing of the developed criteria to ascertain base line values for rating distribution. Once base line values are established for a given dental care service, subsequent rating distributions can be compared with the base line values to ascertain distribution variations by statistical analysis. The distribution variations can then be associated with standards of quality.

For some dental care services, the standard of quality may prove to be 90% to 95% of a given **SATISFACTORY** sub-rating, for others, perhaps, 75% or less. In most instances it would be appropriate to link the standard of quality with service life.

The standard of quality -- whether it be 50% or 75% or 90% -- must be based upon a thorough review of base line data for the particular dental care service over a specific period of time.

## **History and Clinical Examination**

#### General Guidelines

The purpose of the history and clinical examination is to observe and record the pertinent information, past and present, necessary to arrive at a rational diagnosis and treatment plan.

The elements of the history and clinical examination are the same, regardless of the dental service to be performed. These elements include a general physical evaluation in addition to a dental evaluation.

The dental history and clinical examination should focus on the problem or complaint presented by the patient. It should also include a general survey of the oral cavity and related structures.

The dental history and clinical examination records, or charts, should include a tooth chart indicating the oral condition as to:

- Caries
- Restorations, defective or acceptable
- Fixed and removable prostheses
- Missing teeth
- Endodontic status
- Periodontal status, based on minimal probing and screening. Existing conditions including location and measurement of pockets, etiologic factors, mobile teeth, occlusal trauma
- Occlusal status
- Description of the general health and appearance of the neck, lips, gingiva, oral mucosal membranes, tongue, pharynx; evidence of attrition and erosion, bruxism or clenching, harmful habits; and attitude
- Incipient and other types of lesions

The general medical history should contain information pertaining to:

- General health and appearance
- Systemic disease; such as cardiac condition, history of American Heart Association risk factors, diabetes, hepatitis
- Allergies and sensitivity to drugs
- Reaction to dental anesthetics
- Present medication and present treatment

1-1 Rev: 09/21/10

- Hip or any other joint replacement
- Bleeding problems
- Nervous disorders
- Any other pertinent information

The medical history should allow for a thorough physical evaluation of the patient's physical and emotional ability to tolerate dental procedures safely, as well as a general evaluation of his health.

Based upon review of the medical history, and completion of the physical evaluation, the physical status of the patient may be graded in accordance with the American Society of Anesthesiologists' classification:

Class I: A normal health patient for an elective procedure

Class II: A patient with a mild systemic disease

Class III: A patient with severe systemic disease that limits activity but is not incapacitating

Class IV: A patient with an incapacitating disease that is a constant threat to life

Class V: A moribund patient who is not expected to survive 24 hours without the operation

The medical and dental history which is taken initially should be updated periodically. Baseline observations should be recorded for comparison with future observations as the patient returns for periodic examination and treatment.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

1-2 Rev: 09/21/10

## HISTORY AND CLINICAL EXAMINATION

	QUALITY EVALUATION RATING SYSTEM			
		Rating	Operation Explanation	
S A T I S	R ROMEO	Range of Excellence  Code: R  Call: Romeo	The history and examination provide all necessary information for the development of a rational diagnosis and treatment plan.	
F A C T O R	S SIERRA	Range of Acceptability  Code: S Call: Sierra	The history and examination provide sufficient information for diagnosis and treatment plan but one or more features of the history and/or examination deviate from the ideal.	
N O T S A T	TANGO	Not Acceptable Validity Questionable  Code: T Call: Tango	The history and examination, as recorded, do not provide the information necessary for the development of a rational diagnosis and treatment plan but the deficiencies do not appear to be harmful or dangerous for the dental or general health of the patient.	
I S F A C T O R	v victor	Not Acceptable Information Inadequate  Code: V Call: Victor	The history and examination are inadequate for establishment of whether potential harmful or dangerous conditions are present.	

1-3 Rev: 09/21/10

## HISTORY AND CLINICAL EXAMINATION

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS				
Code	History	Code	Clinical Examination		
	A thorough history has been taken initially, including previous radiographs, and updated regularly (dates indicated).		A thorough examination has been conducted and recorded.		
	(Refer to General Guidelines.)		(Refer to General Guidelines.)		
SUD SCM	A fairly complete dental/medical history has been taken initially, but evidence is missing that it has been <b>updated</b> periodically.  A fairly complete dental/medical history has been taken initially, but one or more items		A fairly thorough clinical examination has been conducted and items that are necessary for diagnosis and treatment planning are included. Conditions that clearly deviate from normal health and appearance are recorded, but the clinical examination record		
SRC	have not been <b>completed</b> or <b>recorded</b> .	SIM	is <b>incomplete.</b>		
TGL TSS TAL TSN TMD TTR TBL	Dental/medical history has been taken but is inadequate. Information is missing in regard to general health, or systemic diseases, or allergies and sensitivity, or present medication and treatment or bleeding problems.	TRC	There is no direct <b>record</b> of the clinical examination, but the treatment plan indicates that potentially harmful or dangerous conditions were detected.		
VRC	No <b>record</b> exists to show that a dental/medical history was taken initially or during subsequent treatments.	VCAR VPER VPA VFR VTA VPAT	Harmful or dangerous conditions were not detected in the clinical examination. There is evidence of large carious lesions, periodontal pockets and bone loss, periapical pathology, undetected fractures and traumas, and/or undetected tumors or other pathological conditions.		

1-4 Rev: 09/21/10

### Radiographs

#### General Guidelines

CDA's Council on Peer Review endorses the ADA statement (contained in its Recommendations in Radiographic Practices) which emphasizes the fact that X-radiation for diagnostic purposes should be used only after clinical examination by the dentist and careful consideration of both the dental and general health needs of the patient. The nature and extent of diagnosis for required patient care, rather than the concept of routine use of X-rays as a part of periodic examination of all patients, constitute the only rational basis for determining the needs, type and frequency of radiographic examination. With this in mind, the specific frequency norms contained in the following guidelines should be considered flexible to accommodate individual patient need.

Initial full radiographic series for adults with dentition shall include 14 or more periapical films with necessary bitewing films, or a panographic film with bitewing films and periapical films as necessary. Radiographic aids may include CT's tomographs.

A full radiographic series for edentulous adults, if a periapical series is not preferred, shall include occlusal films with molar-region periapical films, or a panographic film supplemented with all necessary perioapical films in questioned regions.

Initial radiographic series for children, prior to the eruption of the permanent second molars, shall include those periapical and bitewing films or a panographic film or lateral jaw film and those bitewing films that are necessary to depict the erupted and developing dentition, commensurate with the age of the patient.

The dentist's decision to take recall radiographs shall depend upon the individual's age, general or systemic condition, and his or her proneness to caries or periodontal change. Therefore, recall and/or postreatment radiographs are not to be taken on a routine basis, but rather, on an individual basis. Recall radiographs are justified in the presence of questioned pulpal or periapical responses, embedded or impacted teeth, questioned bone change, and delayed development of eruption of the dentition. In these instances, bitewing films or single periapical films of the questioned regions are to be used rather than a full series.

A full radiographic series should not be taken more than once every 3 years unless there are specific indications for more frequent examinations. An attempt should be made to obtain any previous series. A bitewing film series would not be taken more than once in a 12 month period unless there are specific indications for more frequent examinations.<sup>1</sup>

2-1 Rev: 09/21/10

<sup>&</sup>lt;sup>1</sup> The following statement was published in the February 1975 issue of the *Journal of the American Dental Association*, in the section "Bulletin and Highlights."

Dental x-rays are an essential part of the best possible dental care. Dental x-ray examinations made with modern methods and safeguards post no known or documented danger to the patient. The amount of radiation from such x-rays which reaches the gonadal area, for example, is less than that received from natural sources, such as cosmic rays from outer space and background radiation from the earth. Dental x-ray equipment manufacture and use both are monitored by federal and state laws which the dental profession has supported and helped formulate. Just as each person's general and oral health situation is different, frequency of x-ray use cannot be governed by norms universal to all patients. Only the dentists well-trained in radiation practice can examine the patient and determine the minimum number and frequency of x-rays for the diagnosis and prevention of oral diseases. To prevent unnecessary frequency of full radiographic series, an attempt should be made to obtain any previous full radiographic series.

Radiographs should be kept on file for reference in subsequent evaluations and treatment, and should be reviewed on a regular basis, considering not only proposed treatment, but also treatment performed in the past.

For evaluation of treatment of specific sites, such as extraction of third molars, single films, panographic films or lateral jaw films shall be used. Additional films shall not be taken with a full intraoral periapical series unless there are specific indications for additional information unattainable with single intraoral films.

Films must be taken in compliance with state and federal regulations for radiation hygiene.

Original or duplicate films should be forwarded on patient referral or transferred to another practitioner to prevent or minimize need for re-exposure to radiation. The use of double film packets or photographic duplication is recommended for maintaining file records.

In carefully selected cases, where a particular service is in question, postoperative radiographs may be required on an individual basis.

The quality-evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

2-2 Rev: 09/21/10

## **RADIOGRAPHS**

	QUALITY EVALUATION RATING SYSTEM				
		Rating	Operational Explanation		
SAT	R ROMEO	Range of Excellence  Code: R  Call: Romeo	The radiograph (or series of radiographs) is of satisfactory quality and provides the necessary information for diagnostic purposes.		
T I S F A C T O R Y	S SIERRA Call: Sierra	Range of Acceptability  Code: S	The radiograph (or series of radiographs) is of acceptable quality, but exhibits one or more features which deviate from the ideal.		
N O T S A T	T TANGO	Not Acceptable but could be corrected  Code: T Call: Tango	The radiograph (or series of radiographs) is not of acceptable quality, but the deficiency could be corrected.		
	V VICTOR	Not Acceptable cannot be corrected without retaking  Code: V  Call: Victor	The radiograph (or series of radiographs) is not of acceptable quality. The radiograph (or series of radiographs) does not provide the necessary information for diagnostic purposes.		

2-3 Rev: 09/21/10

## **RADIOGRAPHS**

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS					
	Film Contrast, Density,					
Code	Sharpness, Identification	Code	Film Coverage	Code	Image Defects	
	Standard illumination permits differentiation between the various structures of the teeth, the periodontal ligament spacings, the supporting bone and normal anatomic landmarks.  (Refer to General Guidelines)		All crowns and roots, including apices are fully depicted together with interproximal alveolar crests, contact areas and surrounding bone regions.  (Refer to General Guidelines)		Images of all teeth and other structures are shown in proper relative size and contour with minimal distortion and without overlapping images where anatomically possible  (Refer to General Guidelines)	
SDY SCT SDT SCS ST	Differentiation between the various structures of the teeth, the periodontal ligament spacings, the supporting bone and anatomic landmarks require special viewing illumination: File density is excessive or insufficient, or Film contrast is excessive or insufficient, or Image details are inadequate, or Films exhibit creases, or Films exhibit minor stains; but other films in the series allow interpretation of the regions in question.	SCOV	All crowns and roots, including apices, in general, are depicted together with interproximal alveolar crests and contact areas but <b>coverage</b> of the surrounding bone regions does not extend sufficiently to rule out or fully diagnose partially shown or suspected pathologic changes without additional radiographs or further evaluation by referral.	SOLS	Images of some teeth and other structures are slightly distorted, or images of some teeth and other structures exhibit slight interproximal overlapping, but the series of films provides sufficient diagnostic information.	
TMT	Current films are not mounted, or Films are not correctly identified.	TFFQ TBW TVER TIM	Full radiographic series is taken more than once every three years without specific indications, or <b>Bitewing</b> series is taken more than once in a 12-month period without specific indications. <b>Edentulous regions</b> not shown.  Film series is <b>incomplete</b> .		Not applicable.	
VDY VCT VDT VCS VST	Interpretation of possible pathologic changes in the dentition and/or the surrounding bone is uncertain: Film density is inadequate, or Film contrast is inadequate, or Image detail is inadequate, or Films are severely ceased, or Films are severely stained.	VCOV	Film <b>coverage</b> is insufficient to diagnose pathologic changes in the interproximal, infradental, periradicular, and/ or retromolar regions, or Radiographs exhibit <b>cone cutting</b> , rendering films non-diagnostic.	VDTS	Images of teeth and other structures are <b>distorted</b> to the extent that interpretation of normal structure vs. pathological changes is not possible, or Images of teeth and other structures are <b>overlapping</b> to the extent that interpretation of normal structures vs. pathological changes is not possible.	

2-4 Rev: 09/21/10

## **Diagnosis**

#### General Guidelines

Diagnosis consists for the determination of the cause of the patient's dental problem and its classification into a category of disease or dysfunction. It is based upon the findings of the history and clinical examination, including the type of pain, if any, stimuli that induce or relieve the pain, and duration of pain.

Diagnostic aids may include, but are not limited to, radiographs (see prior section) as well as study models (casts), electrical and/or thermal pulp tests, percussion, palpation, transillumination, and laser fluorescent and analysis of saliva, blood, urine, cytology and biopsy, as necessary. Laboratory screening tests are utilized when suggested by the dental and medical history or physical evaluation.

The patient is referred for physician evaluation and recommendation when the patient's physical status is questionable, or other significant conditions appear to be present.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

3-1 Rev: 09/21/10

## **DIAGNOSIS**

QUALITY EVALUATION RATING SYSTEM			
		Rating	Operational Explanation
S A T I S F A	R ROMEO	Range of Excellence  Code: R Call: Romeo	A thorough diagnosis has been made and recorded utilizing the information provided by the patient's history and examination.
C T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The diagnosis which has been made and recorded is adequate for development or a rational treatment plan, even though one or more aspects of the history and examination were not thoroughly considered.
N O T S A T	TANGO	Not Acceptable Validity Questionable  Code: T Call: Tango	The diagnosis is not acceptable for the development of a rational treatment plan but the deficiencies do not appear to be harmful or dangerous for the dental or general health of the patient.
I S F A C T O R	V VICTOR	Not Acceptable Information Inadequate  Code: V Call: Victor	The diagnosis is inadequate for establishment of a rational treatment plan. Actual or potentially harmful or dangerous conditions have not been recognized.

3-2 Rev: 09/21/10

## **DIAGNOSIS**

	QUALITY EVALUATION (	CRITERIA	A AND ABBREVIATIONS
Code	Charting and Reports	Code	Diagnostic Aids
	Complete written diagnostic notations have been made and symbolic tooth charting is used to indicate pathological conditions.		Diagnostic examination is performed with dry, mounted radiographs.
	Consultations and referrals occur where necessary to complete diagnosis, with written		Proper diagnostic aids have been used.
	reports on additional findings. (Refer to General Guidelines)		(Refer to General Guidelines.)
SOM	The diagnosis is acceptable as evidenced and supported by recording of major clinical symptoms and conditions. Minor <b>omissions</b> are apparent which do not appreciably affect the diagnosis and/or the treatment plan.	SRG	Diagnostic examination is performed with "wet" unmounted <b>radiographs</b> , but they are reviewed again when dry and mounted.
TCD	Minor <b>conditions</b> such as gingivitis, early periodontitis, nontraumatic malocclusion, erosion, thickened periodontal ligaments, etc.	TMT TPF	Current radiographs are not <b>mounted</b> and stored in patient's <b>file</b> .
	have not been diagnosed and/or recorded.  Referrals and/or	TDA	Diagnostic casts and/or referrals are inadequate.
VRF VCON	<b>consultations</b> were made, but no records exist in the patient's file.		
VRC	No <b>record</b> exists of harmful or dangerous conditions such as large carious lesions, periapical pathology, fractures, cysts,	VQL	Quality of radiographs is unsatisfactory for accurate diagnosis.
	neoplasms, moderate to advanced periodontal disease, traumatic occlusion, deleterious habits, irritations, denture sores, etc.	VQN	<b>Quantity</b> of radiographs is unsatisfactory for accurate diagnosis.
VRF VCON	Referrals and/or consultations were not made when indicated.	VAI	Insufficient diagnostic <b>aids</b> and <b>tests</b> are employed for thorough diagnosis of presenting symptoms.

3-3 Rev: 09/21/10

#### Treatment Plan

#### General Guidelines

A treatment plan is a statement of the services to be performed for the patient. It is based on the history and clinical examination and diagnosis, to arrive at a logical plan to eliminate or alleviate the patient's dental symptoms, problems and diseases, and to prevent future degenerative changes.

The treatment plan should follow a logical sequence, such as:

- Relief of pain and discomfort
- Elimination of infection, irritations, traumatic conditions
- Prophylaxis and instruction in preventive practices
- Treatment of extensive carious lesions and pulpal inflammation
- Periodontal treatment
- Elimination of remaining caries, necessary extractions
- Restoration and replacement of teeth
- Placement of the patient on a recall schedule to suit the assessed needs

The plan of treatment for infectious processes provides for drainage and other local as well as systemic measures such as drug therapy, fluid and nutritional support. Selection of antimicrobials is based on identification and sensitivity of the infecting organism as well as the efficacy of the agent and its potential adverse effects.

Final restoration of a tooth or teeth that requires endodontic and/or periodontal treatment should be postponed until a favorable prognosis for the retention of the tooth or teeth has been established.

The plan of treatment includes an optimal amount of treatment at any single appointment and is based on the requirements for a functional dentition and a healthy oral cavity.

Outpatient management is planned unless, in the judgment of the dentist, the severity of the disease, complexity of the treatment, or health of the patient warrants hospitalization.

The plan of treatment should include consultation and/or referral for treatment when the nature of the disease, complexity of treatment, or health of the patient is beyond the normal scope of any particular dentist.

No matter how thorough the history and clinical examination, how accurate the diagnosis, or how rational the treatment plan, there will always be situations wherein the patient refuses to accept part or all of the recommended treatment. In fact, there may be occasions where the patient requests a form of treatment that, in the best judgment of the attending dentist, would be neglectful or injurious to his dental health and dental function.

4-1 Rev: 09/21/10

A patient cannot be forced to comply with a recommended course of treatment. Likewise, a dentist cannot be forced to perform services that are contrary to the patient's best interest. The dentist's responsibility is discharged upon informing the patient of the diagnosis, recommended plan of treatment, prognosis and complications. The dentist must be guided and judged by the first principle of health care: "to do no harm." In short, the right of the patient to elect treatment is balanced by the right of the dentist to refuse treatment, so long as both parties understand the rational consequences of their actions. The principle of informed consent requires further legal definition before it can be described explicitly. In general, however, informed consent includes the following:

- Reason for treatment
- Diagnosis
- Prognosis
- Alternate plans of treatment
- Nature of care and treatment
- Inherent risks
- Expectancy of success
- Possible results in treatment is not done

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

4-2 Rev: 09/21/10

## TREATMENT PLAN

	QUALITY EVALUATION RATING SYSTEM			
		Rating	Operational Explanation	
S A T I S	R ROMEO	Range of Excellence  Code: R Call: Romeo	A satisfactory treatment plan has been developed and recorded.	
A C T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The treatment plan which has been developed and recorded is acceptable even though one or more aspects of the diagnosis were not thoroughly considered.	
N O T S A T I	T	Not Acceptable Validity Questionable  Code: T Call: Tango	The treatment plan is not acceptable, or the sequence of treatment is inappropriate, but the deficiencies do not appear to jeopardize the dental or general health of the patient.	
S F A C T VICTOR  Not Accept Inadequate Code: V		•	The treatment plan is not acceptable. Treatment of harmful or dangerous conditions has not been included or the sequence of treatment is inappropriate.	

4-3 Rev: 09/21/10

## TREATMENT PLAN

	QUALITY EVALUATION C	CRITERI	A AND ABBREVIATIONS
Code	Documentation	Code	Sequence
	The treatment plan and procedures are written systematically in the patient's record before treatment is started. Where only operative procedures such as restorations are planned, symbolic charting will suffice as a treatment plan.		The treatment plan is written and follows a logical sequence.
	(Refer to General Guidelines.)		(Refer to General Guidelines.)
STP	The treatment plan is recorded <b>sketchily</b> , and/or the restorative treatment procedures are not planned.	SSQ	The treatment plan lacks <b>systematic sequence</b> ; but either the sequence is not important or it is obvious from the charting.
ТТР	There is <b>no written plan</b> of treatment of routine uncomplicated case.	TSQ	The <b>sequence</b> of treatment may delay treatment of existing conditions that are potentially harmful.
VTP	There is <b>no written plan</b> of treatment of complex cases.	VPRI	<b>Priority</b> has not been given to the treatment of serious conditions that are harmful or dangerous.

4-4 Rev: 09/21/10

## Management of Pain, Anxiety and Emergencies

#### General Guidelines

Pain and anxiety management can be defined as the application of various physical, chemical, and psychological modalities to the prevention and treatment of patients' pre-operative, operative and post-operative apprehension and pain.

Proper management of pain, anxiety, and emergencies requires training in selection and use of techniques, agents and armamentarium and pre-anesthetic evaluation. Management of pain and anxiety should be based upon the professional judgment of the dentist after consideration of the needs and desires of the patient.

The management of pain and anxiety attempts to achieve the following goals for the patient:

- Relief of anxiety, apprehension, and fear
- Pain-free treatment
- Freedom from pain and anxiety during the post-treatment period

There are a variety of terms used to describe the different methods of managing pain and anxiety. The following are definitions of the terms used in this document:

*Sedation*: The calming of a nervous, apprehensive individual by the use of systemic drugs, without inducing loss of consciousness, where agents may be given orally, parenterally or by inhalation.

*Analgesia*: The diminution or elimination of pain in the conscious patient.

*Local Anesthesia*: The elimination of sensations, especially pain, in one part of the body by the topical application or regional injection of a drug.

General Anesthesia: The elimination of all sensations, accompanied by a state of unconsciousness.

*Premedication*: Premedication by one of the following routes; oral, rectal, parenteral or inhalation results in relief of apprehension, anxiety and fear, provides elevation of the pain threshold and potentiates the action of local, inhalation and parenteral anesthetic agents. Nitrous oxide analgesia is in essence a form of premediation. The patient should be properly accompanied after premedication by a responsible individual.

*Post-operative Care*: Adequate post-operative instructions and post-operative medications, as well as appropriate provisions for post-treatment professional care should be provided.

*Emergencies*: A plan for management of emergencies should exist and be rehearsed on a regular basis. See the general guidelines for "Preventive Measures" for detailed information on this subject.

5-1 Rev: 09/21/10

Since many of the features of evaluation in anesthesia, anxiety and pain control are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

5-2 Rev: 09/21/10

## MANAGEMENT OF PAIN, ANXIETY AND EMERGENCIES

QUALITY EVALUATION RATING SYSTEM					
		Rating	Operational Evaluation	Code Premedication	
S A T I S F A C T O R Y	R ROMEO	Range of Excellence Code: R Call: Romeo	Management of pain and anxiety is satisfactory for the treatment rendered.		Relief of apprehension, anxiety andfear provides elevation of the pain threshold and potentiates the action of local, inhalation and parenteral anesthetic agents.  (Refer to General Guidelines.)
1	S SIERRA	Range of Acceptability Code: S Call: Sierra	Acceptable pain and anxiety management has been instituted but one or more aspects deviate from the ideal.	SPM	Acceptable <b>management</b> of premedication has been accomplished but one or more aspects deviate from the ideal.
N O T	TANGO	Not Acceptable Rationale Questionable  Code: T Call: Tango	Management of pain and anxiety is not acceptable but the deficiencies have not caused harm to the patient.	ТРМ	Management of pain and anxiety is not effective.
T I S F A C T O R Y	V VICTOR	Not Acceptable Inadequate Code: V Call: Victor	Management of pain and anxiety is not acceptable. Harmful conditions have resulted.	VPM	Management of pain and anxiety is not acceptable. Harmful conditions have resulted.

5-3 Rev: 09/21/10

## MANAGEMENT OF PAIN, ANXIETY AND EMERGENCIES

QUALITY EVALUATION CRITERIA AND ABBREVIATIONS							
Local				Postoperative			
Code	Anesthesia	Code	Sedation	Code	General Anesthesia	Code	Pain and Anxiety
	Local anesthesia by topical or parenteral route resulted in prevention and/or relief of a painful response.		Anxiety, apprehension and fear are allayed and the pain threshold is elevated to decrease stress and to decrease undesirable reflex activities. Satisfactory equipment and monitoring of patients is available and is carried out.		The patient was rendered unconscious, maintained smoothly, and reawakened with freedom from any associated hazards or side effects (morbidity). Satisfactory equipment and monitoring of patients is available and is carried out.		Have resulted in complete management of postoperative pain, anxiety and agitation.
	(Refer to General Guidelines.)		(Refer to General Guidelines.)		(Refer to General Guidelines		(Refer to General Guidelines.)
SLA	Acceptable local anesthesia has been accomplished but one or more aspects deviate from the ideal.	SSD	Acceptable <b>sedation</b> has been accomplished but one or more aspects deviate from the ideal.	SGA	Acceptable general anesthesia has been accomplished but one or more aspects deviate from the ideal.	SMA	Post operative management of pain and anxiety has been accomplished but one or more aspects deviate from the ideal.
TLA	Local anesthesia is not effective.	TSD TAT	Sedation is not effective.  Patient is not accompanied by a responsible person.	TGA TAT	General anesthesia is not effective.  Patient is not accompanied by a responsible person.	TMA	<b>Management</b> of post operation pain and anxiety is not effective.
VLA	Management of local anesthesia is not acceptable. Harmful conditions have resulted.	VSD	Management of sedation is not acceptable. Harmful conditions have resulted.  Patient is not	VGA	Management of general anesthesia is not acceptable. Harmful conditions have resulted.  Patient is not	VMA	Management of post operative pain and anxiety is not acceptable. Harmful conditions have resulted.
		7111	accompanied by a responsible person.	7711	accompanied by a responsible person.		

5-4 Rev: 09/21/10

## **Preventive Dentistry**

#### General Guidelines

Preventive dentistry includes all of those clinical tests and procedures, plus dental health education programs whose goals are to prevent and/or eliminate caries, periodontal disease or any other oral disease.

Caries Prevention: A comprehensive program of plaque removal and control by both the dentist and patient is the basic start toward caries prevention. This is coordinated with the education, diet counseling fluoride use and periodic professional prophylaxis. The frequency and type of prophylaxis is dependent on the patient's rate of plaque and calculus formation and caries susceptibility, and can range from a simple polishing to extensive scaling, root planning and polishing.

Periodontal Disease Prevention: Periodontal disease is the most prevalent disease of mankind, but. with the application of basic preventive procedures early in life, the disease may be prevented. Here again, a comprehensive program of plaque removal and control is necessary, along with all other procedures. Additional procedures include dental health education and thorough professional prophylaxis, as well as occlusal evaluation and diet counseling. Establishing a healthy environment for the gingival tissue by correcting malocclusions and malposed teeth, restoring broken down and deformed teeth, replacing missing teeth and requiring the patient to practice thorough plaque control is necessary for the prevention of periodontal disease.

Prevention of Other Oral Diseases: Irritants of the mouth and to the oral tissues are some of the most common causes of inflammation and ulcerations of the oral mucous membrane and gingival. The reduction or elimination of any factors of constant mechanical and/or chemical irritation, psychological stress, or other traumatic irritation is necessary to aid in the prevention of some oral disease. The recognition of potentially harmful tissue changes is the diagnostic responsibility of the dental practitioner, and many times requires the assistance of other professionals and a cooperative effort on the part of the patient, dentist and physician.

Prevention of Systemic Complication: Requires physical evaluation and thorough history procedures as outlined in the section of this text dealing with "History and Clinical Examination." Interprofessional cooperation between dentist and physician may be advisable in individual instances. The goal in evaluation is to determine the physical and emotional ability of a particular patient to tolerate a specific dental procedure.

Rating Systems and Criteria: The committee has not developed a rating system for quality evaluation and quality evaluation criteria and abbreviations for plaque control. A rating system for quality evaluation, quality evaluation criteria and abbreviations have been developed for prophylaxis (including polishing and scaling).

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

6-1 Rev: 09/21/10

## **PROPHYLAXIS**

		QUALITY EVAL	UATION RATING SYSTEM
		Rating	Operational Explanation
S A	R	Range of Excellence	Prophylaxis by polishing and/or scaling is of satisfactory
T I S	ROMEO	Code: R Call: Romeo	quality and is expected to contribute to prevention of caries and/or periodontal disease.
F A C T	S	Range of Acceptability	Prophylaxis by polishing and/or scaling is of acceptable quality, but exhibits one or more features which deviate from
O R Y	SIERRA	Code: S Call: Sierra	the ideal.
N O T S A	TANGO	Repeat for Prevention Code: T Call: Tango	The prophylaxis is not of acceptable quality. Future damage to the tooth and/or its surrounding tissue is likely to occur.
T I S F A C	V	Repeat Statim	The prophylaxis is not acceptable quality. Damage to the tooth and/or its surrounding tissue is now occurring.
T O R Y	VICTOR	Code: V Call: Victor	tooth and/or its surrounding tissue is now occurring.

## **PROPHYLAXIS**

	QUALITY EVALUATION (	CRITERIA	AND ABBREVIATIONS
Code	Documentation	Code	Scaling*
	No visible stains or bacterial plaque remain on the teeth following the use of disclosing media.		Supragingival and subgingival calculus has been removed regardless of its location or depth.
SST	Minor <b>stains</b> remain in a few areas such as deep fossae following the use of disclosing media.	SIS	General removal of calculus with <b>isolated deposits</b> remaining. No irreversible tissue damage.
TSPL	Stains and bacterial plaque remain throughout the dentition following the use of disclosing media.		Not Applicable.
VGS VMT	Gross stains evident without disclosing media, or  Material Alba remains.	VCAL VTD	Supragingival and subgingival <b>calculus</b> is still present as evidenced by visual, digital and/or radiographic examination, or Adjacent <b>tissue</b> has been <b>damaged</b> irreversibly.

<sup>\*</sup> Scaling is defined as the procedure designed to remove calculus and bacterial debris from the teeth. Criteria for root planning are listed under Periodontics.

### **Endodontics**

#### General Guidelines

Endodontic services include:

- Vital pulp treatment
- Pulpectomy
- Non-surgical treatment of root canals and pulp chambers
- Surgical treatment of periapical and lateral pathosis of pulpal origin
- Apicoectomy and retrograde filling
- Replantation of teeth

Since many of the features of evaluation in endodontics are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area have been included.

Examination of the endodontic patient should include an evaluation of the pain and the stimuli that induce or relieve pain. Such tests as thermal, electric, percussion, palpation, test cavity and mobility may be used. Treatment planning should include the strategic importance of the tooth or teeth considered for treatment, the prognosis, and such other factors as excessively curved canals, periodontal disease, occlusion, tooth fractures and calcified or occluded canals. Teeth that are predisposed to fracture following endodontic treatment should be adequately protected.

### **Endodontic services may include:**

### **Vital Pulp Treatment:**

*Indirect pulp capping* may be indicated in the presence of deep carious lesions when there is evidence of vital and normal pulp tissue. It is a two stage procedure, the second stage of which is accomplished after there is adequate radiographic evidence of protective reparative dentin formation.

Direct pulp capping may be indicated in the presence of a small exposed vital and asymptomatic pulp.

*Pulpotomy* may be indicated in permanent teeth when there is evidence of a vital and normal pulp in order to maintain pulp vitality in the immature permanent root or roots and promote maturation of the root. When the root is fully formed, endodontic treatment should be completed

Pulpotomy may be indicated on deciduous teeth where there is a reasonable residual period of retention and function of the deciduous tooth and when the pulp pathosis is confined to the coronal portion or when there is a pulp exposure too large for capping.

Factors which should be considered in determining the acceptability of vital pulp treatment are:

- Radiographic evidence of calcification, i.e., reparative dentin formation for pulp capping and root apex maturation for pulptomy.
- The absence of tooth supportive structure changes.
- A normal vital pulp response for pulp capping in an asymptomatic tooth.

### **Root Canal Treatment:**

Root Canal treatment may be indicated on teeth with diseased or potentially diseased pulp with or without evidence of periapical pathosis. Treatment procedures consist of:

- Acceptable access
- Bio-mechanical cleansing and the shaping of the canal system
- Obturation of pulp chamber and root canal system with a suitable radiopaque filling material and sealer.

Above procedures should be performed under rubber dam isolation.

### **Non-Surgical Root Canal Treatment:**

- Apexification treatment may be indicated on a tooth with a necrotic pulp which has an immature root. The treatment involves the induction of apical closure over a period of several months. When closure is complete, normal endodontic therapy is performed.
- In the alternative, an apical barrier using a bio compatible material may also be acceptable.

### **Surgical Root Canal Treatment:**

- Surgical treatment may be indicated when:
  - The root canal system cannot be acceptably treated non-surgically
  - There is active root resorption
  - Access to the canal is obstructed
- There is gross over fill of the root canal filling
- Periapical or lateral pathosis persists despite an acceptable root canal therapy
- There is a fracture of the root or perforation at a level where the tooth has a guarded or better prognosis
- There is periodontal involvement requiring root amputation or hemisection

*Hemisection* may be indicated when there is a fracture dividing the crown and/or roots or there is extensive loss of bone support for one or more of the roots and retention of one half of the tooth is considered necessary for maintenance of function.

Root Amputation may be indicated on multi-rooted teeth when there is extensive loss of bone support on one root and amputation will significantly aid the periodontal condition and the patient's access for cleaning the involved area. Root canal treatment on the retained portions of the canal system is preferably completed prior to hemisection or root amputation.

An important factor which should be considered for the acceptability of root amputation and hemisection is the accomplishment of suitable hard and soft tissue contours that maximizes the patient's access for cleaning and minimizes the entrapment of food and oral debris.

Replantation of a tooth may be indicated when the canal system is not accessible and owing to anatomic consideration apical surgery in site is not advisable. Teeth that have been accidentally avulsed from the alveolus may be replanted to their original position. Root canal treatment is performed prior or after replantation although the latter has been recommended. Occlusal adjustment and stabilization may be necessary. All replanted teeth may show varying radiographic signs of root resorption. Failure of the replanted tooth from root resorption may occur in one or two or more years. The degree or extent of root resorption increases the longer the time interval for returning the tooth to its alveolus.

Success or failure of endodontic therapy is not solely related to the technique which is utilized. Immediate post operative radiographs are helpful in evaluating the techniques of endodontic treatment but long term success of the treatment is determined by follow-up examinations continued for a minimum of two years after treatment. The examinations must include periapical radiographs, clinical examination and a record of the presence or absence of symptoms.

Endodontic cases that lie outside the knowledge and experience of the treating dentist should be referred for consultation and/or treatment.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

## **ENDODONTICS**

		QUALITY EVAL	UATION RATING SYSTEM
		Rating	Operational Explanation
SA	R ROMEO	Range of Excellence  Code: R  Call: Romeo	The endodontic treatment is of satisfactory quality and is expected to preserve the natural dentition.
T I S F A C T O R	S SIERRA	Range of Acceptability Code: S Call: Sierra	The endodontic treatment is of acceptable quality but exhibits one or more features which deviate from the ideal.
N O T S A T I S	T TANGO	Repeat or correct for Prevention Code: T Call: Tango	The endodontic treatment is not of acceptable quality. Future damage to the tooth and/or its surrounding tissues is likely to occur.
F A C T O R Y	V VICTOR	Repeat or Correct Statim Code: V Call: Victor	The endodontic treatment is not of acceptable quality. Damage to the tooth and/or its surrounding tissues is now occurring.

## **ENDODONTICS**

	QUALITY EVALUATION CRI	ΓERIA	AND ABBREVIATIONS
			Root Canal Treatment Surgical and
Code	Vital Pulp Treatment	Code	Non-Surgical
	Treatment has been accomplished and tooth is asymptomatic.		Tooth is asymptomatic.
	Evidence of reparative dentin formation.		The endodontic filling is dense and obturates the root canal system.
	Vital pulp response.		Treated tooth or teeth are functional and non-
	(Refer to General Guidelines.)		mobile.  (Refer to Conoral Cuidelines)
COM	T. d. i	COM	(Refer to General Guidelines.)
SSY SAT	Tooth is asymptomatic. Abnormal thermal response.	SSY	Tooth is <b>asymptomatic</b> or there is presence of <b>symptoms</b> either spontaneous or provoked in light of treatment having been accomplished.
		SFD	Endodontic filling (Gutta Purcha, MTA, GI,
		SOF	<i>Biocalex)</i> lacks <b>density</b> and shows <b>minor</b> voids in the coronal 2/3 of canal.
		SOE	<b>Over-extention</b> $\leq$ to $\sim$ 1.0mm) of the root canal.
		SUE	<b>Under-extention</b> ( $\leq$ to $\sim$ 1.0mm) of the root canal.
		SOA	Over-extention (minor) of access.
		SIR	Evidence of some residual tissue (scarring).
		SSF	Obturation to correct canal terminus bypassing a
			documented Seperated file.
		SSFF	Obturation up to a documented Separated file,
		SIC	asymptomatic and devoid of pathosis.
		SRR	Improved but incomplete apical calcification.
TEN IX I	N		Evidence of some <b>root resorption</b> .
TNV	Non vital pulp.	TPN	Intermittent spontaneous pain. Pain in response
TPN	Intermittent spontaneous pain,	TPNE	to percussion, or
TPNE TPNA	Pain in response to <b>percussion</b> , <b>palpitation</b> or	TPNA TPNF	palpatation, or
TPNA	function.	IPNF	<b>function</b> (all etiologic to noted unacceptable execution of the root canal procedure).
IFNF	function.	TOF	<b>Overfilled</b> ( $\geq$ to $\sim$ 1.0mm) of the root canal.
		TUF	Underfilled (> to ~ 1.0mm) of the root canal.
		TPAT	Evidence of persistent <b>Pathosis</b>
		TIF	<b>Incomplete</b> instrumentation and obturation of
			canal in apical 1/3 with radiographic evidence of pathosis.
		TUC	Unnegotiated/Untreated canals.
		TFU	No follow up procedure established.
VPN	Persistent pain.	VPN	Persistent pain/paresthesia
VPAT	Radiographic evidence of pathosis.	VPAT	Radiographic evidence of pathosis,
VSW	Clinical evidence of <b>swelling</b> .	VSW	Clinical evidence of <b>swelling</b> ,
VSI	Sinus tract.	VSI	Sinus tract (all etiologic to noted unacceptable
			execution of the root canal procedure).
		VPD	Undocumented Perforation.
		VSF	Undocumented Separated File.
		VSP	Sargenti paste/formaldehyde containing
		VTF	<b>transported</b> /zipped paste instrumentation obturation with pathosis.

## **ENDODONTICS**

Patient:	Dentist:
Date of Examination:	Examiner:
Treatment in Question:	
	Date & Type radiograph(s) reviewed:
Describe periodontal health of tooth/teeth being	treated: Patient's contribution:
Remarks: (wishes and attitudes)	
	plaints:
	Patient told to seek treatment? Yes No
	ate 3. Emergency
CLINICAL SUMMARY: Satisfactory/Unsatisf	
•	
state reason for above summary.	
Operational Explanation:	Comments/Observations:
R - Range of excellence	Comments/Observations.
S - Satisfactory	
T - Unsatisfactory, future damage is likely to o	ccur
V - Unsatisfactory, damage to patient has now	occurred
	Vital/Pulp Treatment:
	RestoredTemporized:
Evaluation:	
Asymptomatic	Pain(describe)
Percussion, Palpation	
Mobility	
Canal Instrumentation:	
Instrumented to radiographic apex	Perforated canal
Instrumental short of the radiographic apex	Under-instrumented
Instrumented past the radiographic apex	Over-instrumented
Transported canal	Canal not negotiated
Canal Obturation:	
	Silver point Other/Unknown R S T V (circle one)
Density R S T V (circle one)	Single Point Fill R S T V (circle one)
Surplus/Overfill R S T V (circle one)	Short Fill R S T V (circle one)
Swelling Y / N (circle one)	Comments/Observations:
Sinus Tract Y / N (circle one)	

#### **General Guidelines**

Periodontics consists of the diagnosis, treatment and prevention of pathologic, abnormal, or unesthetic conditions affecting the supporting tissues of the teeth, and their replacements (implants), including the gingiva, the periodontal ligament, and the alveolar bone. Each patient must be evaluated and diagnosed taking into account all local, systemic and environmental conditions which could affect the outcome of periodontal therapy.

The clinical examination of the periodontal patient should record the presence or absence of inflammatory and non-inflammatory abnormalities (usually manifested by the color and texture of the gingival tissues), the condition and stability of the dentition and the depth of periodontal pockets. Significant areas of recession, mobility, open or improper contacts, furcations, abnormal, occlusal contacts, interferences or presence of trauma, bleeding or exudates, and degree of tooth born deposits should also be recorded. Mucogingival problems such as shallow vestibule, abnormal frenum pull or lack of attached gingival should be noted. Radiographs, CT's, tomographs may also be used as additional diagnostic tools to evaluate the condition and anatomy of alveolar bone and teeth. Restorative, periodontal and endodontic needs as well as pathologic or relevant anatomic conditions must be diagnosed both clinically and radiographically and appropriately incorporated into a treatment plan.

Children, adolescents, and adults should be screened for evidence of periodontal disease. Where evidence of disease exists, patients should be examined, probed and charted to provide baseline information of the periodontal condition and informed of the presence of any periodontal disease. A notation regarding the results of a periodontal examination should be made in the patient's record, whether or not the dentist treats the condition, refers the patient, or the patient does not elect treatment at that time. The periodontium should be evaluated for signs of disease as part of orthodontic treatment planning. Orthodontic therapy should be preceded by appropriate periodontal therapy, because orthodontic tooth movement in the presence of inflammation can contribute to irreversible bone loss.

For purposes of assessment, this manual considers root planning and scaling, periodontal surgery and case results and management. Scaling and root planning should result in removal of biofilm, smoothing root irregularities and roughness, removal of accessible sub-gingival deposits and leave a root that feels smooth and hard. It should be realized that deposits beyond 4 mm and those antomically inaccessible will most likely be left behind. Adjunctive use of slow released topical antimicrobials could be performed on selective sites however clinically significant improvement over scaling alone may prove to be minimal. In most instances, after scaling a period of healing (usually 4-6 weeks) a re-evaluation of the periodontal condition should be made and the need for further active therapy assessed. However, there are times when initial preparation can be bypassed (acute infection, need for visual access to the subgingival area to remove or expose irritants or abnormalities, need for crown lengthening, etc.) and an immediate surgical approach without pre-scaling would be in the patients best interest. There are also times when an exclusively non-surgical approach with careful monitoring can be instituted. These options should be left up to the clinical judgement of the individual practitioner with the informed consent of the patient.

The purpose of periodontal mucogingival flap surgery is primarily access, secondarily pocket reduction, and finally ability to perform regenerative procedures. Periodontal flap surgery may be accomplished by a variety of scalpels or other cutting devices. Gingivectormy, flap, osseous

and other mucogingival periodontal surgery should result in the reduction or elimination of periodontal pocketing. The gingiva should be restored to appropriate physiologic form commensurate with health albeit sometimes at a more apical position. Deformities in the alveolar bone are corrected by osteoplasty and/or osteoectomy or regenerative procedures such as bone grafting or guided tissue regeneration or use of growth factors or other biologicals. Flap access is required for alveolar bone related procedures.

Gingival curettage is the intentional removal of the soft tissue compromising the sulcular wall via blade, laser, etc. It is not supported by scientific evidence as a definitive procedure or as a supplement to scaling and root planning.

The amount of attached gingiva considered to be adequate will vary with clinical conditions. Gingival augmentation procedures should ideally be performed when there is inadequate attached gingival tissue. The adequacy of attached tissue will vary depending on local factors (ie: subgingival restoration, ortho, etc.). There are a variety of surgical methods available to accomplish these ends such as pedicle, free and oblique grafts as well as guided tissue regeneration. Periodontal plastic surgical procedures can be performed for esthetics or sensitivity and in cases where continued increased recession has been documented. Procedures such as pedicle, connective tissue, guided tissue regeneration and dermal grafts have been used to augment both teeth and edentulous ridges. Gingival reduction procedures are also available to reduce gingival display or gingival overgrowth.

Directly following treatment, clinical examination ideally should evidence healthy tissues, absence of inflammation and gingival bleeding, acceptable gingival form and reduced levels of bacterial plaque and calculus and a non-traumatic occlusion. It is critical that from the onset the patient should be trained and evaluated in skills for plaque control procedures, preferably using an objective means such as a plaque index. A follow-up program for evaluation of the success of treatment, continuous supportive therapy and maintenance program should be established. The maintenance interval for a patient with a history of periodontitis is usually every 90 days but can vary depending on each patients needs. The condition of the periodontal tissues, the significant pocket depths and the future plan of treatment should be recorded at each maintenance visit.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

### **PERIODONTICS**

	QUALITY EVALUATION RATING SYSTEM						
		Rating	Operational Evaluation	Code	Root Planing and Scaling*		
S A T I S F	R ROMEO	Range of Excellence Code: R Call: Romeo	The periodontal treatment is of satisfactory quality and is expected to contribute to prevention of caries and/or periodontal disease.		Irregularities and roughness and deposits have been removed and the roots smoothed.  (Refer to General Guidelines.)		
A C T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The periodontal treatment is of acceptable quality, but exhibits one or more features which deviate from the ideal.	SSM	A smooth, optimally cleansable root surface has been achieved in most areas, but there are still teeth or parts of some roots that should have more <b>smoothing</b> at a future time.		
N O T S A T I	TANGO	Repeat or Correct for Prevention Code: T Call: Tango	The periodontal treatment is not of acceptable quality. Future damage to the teeth and/or their surrounding tissue is likely to occur.	TSM	Inadequate removal of deposits and/or no <b>smoothing</b> on the roots has been done.		
S F A C T O R Y	V VICTOR	Repeat Statim Code: V Call: Victor	The periodontal treatment is not of acceptable quality. Damage to the teeth and/or their surrounding tissue is now occurring.	VDM	Root planing and scaling has resulted in <b>permanent damage</b> to tooth structure.		

<sup>\*</sup> Scaling is defined as the procedure designed to remove calculus and bacterial plaque from the teeth (also see under PROPHYLAXIS). The term subgingival curettage is used interchangeably by some practitioners to mean scaling and root planning, but is not to be confused with tissue surgical curettage listed under periodontal surgery.

## **PERIODONTICS**

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS						
Code	Gingival Grafting	Code	Gingivectomy, Flap, Osseous, Muco-gingival and All Other Periodontal Surgery	Code	Case Results and Management		
	No clinical sign of inflammation is evidenced by bleeding or purulence upon probing. There is adequate attached gingival. Root coverage has been accomplished where attempted.		Gingiva is restored to appropriate physiologic form and deformities in the alveolar bone have been corrected. Pockets have been reduced. There is evidence of bone regeneration where attempted.		Clinical examination records satisfactory treatment. A stable periodontium. A recall schedule has been established and is being followed.		
	(Refer to General Guidelines.)		(Refer to General Guidelines.)		(Refer to General Guidelines.)		
SSI	There are some <b>isolated</b> areas of <b>inflammation</b> . The amount of post grafting attached gingival is minimal but acceptable. Some root coverage has been achieved, where attempted.	SCP	There are some areas of periodontal <b>compromise</b> but the patient can maintain the mouth in an acceptable state of health. Most pockets have been reduced. Evidence of some bone regeneration is demonstrated or has not been accomplished because of patient non-compliance.	SCP	Clinical examination reveals a health mouth, but there are some areas of <b>compromise</b> due to anatomical and aesthetic considerations or limited patient cooperation. A recall schedule was established, but the <b>patient failed</b> to return or has not carried out oral hygiene as instructed and demonstrated.		
TNGA	No attachment gingival remains. Minimal or no root coverage has been achieved, where attempted. The patient has not been informed of his/her condition and no plan for improving or following up the condition has been made.	TPAT	Surgery has not eliminated or controlled the problem it was performed to correct. Bone regeneration has not been accomplished because of operator error. Appropriate maintenance or follow up has not been established or recommended by the dentist.	ТСМ	The treatment plan was not <b>completed</b> or followed by the dentist. An adequate post treatment maintenance interval has been established by the dentist. The patient never demonstrated the ability to carry out adequate plaque control prior to surgical therapy.		
VLTO VMRR VPNI	There is less attached tissue than original. There is more root exposure than original. The patient has not been informed of his/her condition and no plan for improving or following up the condition has been made.	VPAT	Surgery has <b>aggravated</b> the periodontal condition and the condition is worse than original. The patient has never been informed of or demonstrated the ability to comply with necessary oral hygiene and maintenance requirements.	VCD	Clinical examination reveals continual deterioration without remedial intervention. The practitioner failed to diagnose the condition, realistically prognosticate or formulate an appropriate treatment plan or carry it out.		

## PERIODONTICS

Date of Examination: Examiner: Examiner: Treatment in Question: No Date & Type radiographs reviewed: Describe radiographic findings:	
Radiographs taken at examination? Yes No Date & Type radiographs reviewed: Describe radiographic findings: Describe general periodontal health: Patient's Contribution: General health: Remarks: (wishes and attitudes) Additional Complaints: Patient told to seek treatment. Yes No 1. Additional 2. Immediate 3. Emergency Informed Consent (prior to treatment): Yes No Not Applicable CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
Describe radiographic findings:  Describe general periodontal health:  Patient's Contribution:  General health:  Remarks: (wishes and attitudes)  Additional Complaints:  Remarks to Patient:  Patient told to seek treatment. Yes No  1. Additional	
Describe general periodontal health:  Patient's Contribution:  General health:  Remarks: (wishes and attitudes)  Additional Complaints:  Remarks to Patient:  1. Additional  2. Immediate  3. Emergency  Informed Consent (prior to treatment): Yes No Not Applicable  CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
Patient's Contribution:  General health:  Remarks: (wishes and attitudes)  Additional Complaints:  Remarks to Patient:  Patient told to seek treatment. YesNo  1. Additional 2. Immediate 3. Emergency  Informed Consent (prior to treatment): YesNo Not Applicable  CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
Patient's Contribution:  General health:  Remarks: (wishes and attitudes)  Additional Complaints:  Remarks to Patient:  Patient told to seek treatment. YesNo  1. Additional 2. Immediate 3. Emergency  Informed Consent (prior to treatment): YesNo Not Applicable  CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
General health:  Remarks: (wishes and attitudes)  Additional Complaints:  Remarks to Patient:  Patient told to seek treatment. YesNo  1. Additional2. Immediate3. Emergency  Informed Consent (prior to treatment): YesNoNot Applicable  CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
Remarks: (wishes and attitudes)	
Additional Complaints:  Remarks to Patient:	
Remarks to Patient:Patient told to seek treatment. YesNo  1. Additional 2. Immediate 3. Emergency  Informed Consent (prior to treatment): Yes No Not Applicable  CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
1. Additional 2. Immediate 3. Emergency Informed Consent (prior to treatment): Yes No Not Applicable CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
Informed Consent (prior to treatment): Yes No Not Applicable CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
State reason for above summers:	
State reason for above summary:	
Operational Explanation (circle one)  R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring	
Root Planning & Sealing Comments/Observations	
Treatment Plan: acceptable / non-acceptable (circle one)	
Treatment: R S T V (circle one)	
Gingival Curettage Comments/Observations	
Treatment Plan: acceptable / non-acceptable (circle one)	
Treatment: R S T V (circle one)	
Periodontal Surgery Comments/Observations	
Type: gingivectomy flap osseus muco-gingival other  Treatment Plan: acceptable / non-acceptable  Treatment: R S T V (circle one)	

Dentist:	Patient:	Examiner:		
Diagnosis (type/degre	e)	Plaque Control		
Gingivit	tis:	Good:		
Periodontit	tis:			
	val:	1950/005974-4-7		
Etiolog	gy:	Tenacious subgingival calculus:		
Gingiva	120.00	W. W. = 1		
Recession:		Knife Edge:		
Enlarged/Pseudopocket Pink:		Rolled: Blunted/Thick:		
Red:		Festooned:		
Other:		10 (00000000000000000000000000000000000		
		$\wedge \wedge $		
	M M M M M M M M M M M M M M M M M M M	(1) (1) (1) (2) (3) (3)		
Labial/Buccal	1 2 3 4 5 6 7 8 9 10	11) 12) 13\ 14\ 15\ 16\		
Labiai/ Daccai				
		2 (P) (P) (P) (P) (P)		
	. ^ ^			
		// // // // // // // // // // // // //		
Palatal	MANAMANIAMI	MAMAM		
	$\omega\omega\omega\omega$			
Occlusion: CL   II	Division CL III	Prognosis:		
Stable:				
Bite collapse:				
Facets/Attrition:	/Pre-maturities: Group Function: R L Other:	Mandible: Good Fair Guarded/poor Hopeless		
Plungers:				
	Inadequate gingiva:			
	m m m a a a a a a			
Labial/Buccal	32 31 30 29 28 27 26 25 24 23	(22) (21) (20) 19   18   17		
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	(H) (H) (H) (H) (D 0000	(A) (B) (H-1) (H-1) (H-1)		
Linqual				
	mm-mm-mm	mmmm		
	$\sim$ $\sim$ $\sim$ $\sim$ $\sim$ $\sim$ $\sim$ $\sim$ $\sim$	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		
		VVV		
	Gingival Recession: Indicate amount	of root surface.		
<b>S</b> = Suppura	ation on Probing <b>B</b> = Bleeding on Probing <b>M</b> = Mucogingi	val Problems Furcation: $\mathbf{V} \ igtriangledown \ \mathbf{V} \ igtriangledown \ \mathbf{V}$ Mobility: I II III		
<b>⊿∟</b> = Overhan	ng GBOP = Generalized Bleeding on Probing II between tee	th = poor contact		

## **Oral and Maxillofacial Surgery**

#### **General Guidelines**

Oral and maxillofacial surgery is the specialty of dentistry which includes the diagnosis and the surgical and adjunctive treatment of the diseases, injuries and defects involving both the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial regions.

Since many of the features of oral surgery care are common to all of dental practice, they will not be covered in detail in this section. Only those aspects that are of special importance for surgical treatment have been included.

Specific guidelines have been developed for the following categories for oral and maxillofacial surgery:

#### Preventive Measures:

- Provision for management of medical, surgical or dental emergencies
- Acceptable methods of prophylaxis utilized to prevent medical complications
- Standards of asepsis including autoclaving of all surgical instruments, utilization of single use injection needles, cleanliness of treatment areas and aseptic scrub and surgical techniques which include sterile gloves and drapes and surgical scrub of the hands and operative sites.
- All tissues removed at surgery should be identified macroscopically and/or microscopically. Immediate definitive care is mandated by suspected malignancy or other life threatening conditions.
- Removal of mal-positioned and impacted teeth which are regarded as pathologic by virtue of their position. Corrective surgical intervention as determined by clinical and radiographic examination by the treating dentist with the following exceptions:
  - Teeth with potential for replacement of diseased or compromised adjacent teeth
  - Teeth which can be brought into position orthodontically, when the modality is indicated and planned
  - Those unusual conditions where the health interests of the patient are served by retention of the teeth in question
- Provision for scheduled follow up and observation

### Therapeutic Measures

 Dental extractions are based on a clearly recorded diagnosis for which extraction is treatment choice of the dentist and patient. Extractions may be indicated in the presence of non-restorable caries, untreatable periodontal disease, pulpal and periapical disease not amenable to endodontic therapy and malposed, unerupted or impacted teeth or when

overriding medical conditions exist which provide compelling justification to eliminate existing or potential sources of oral infection.

- Tissue management includes flap design appropriate to the surgical procedure, bone removal accomplished with acceptable surgical methods, tooth sectioning when indicated, reapproximation of displaced tissue to avoid exposed bone and use of pressure dressings and other supportive measures when indicated.
- Completion of the procedure includes all portions of extracted teeth having been removed unless contraindicated, contouring of bone supporting soft tissue to reduce post-operative sequelae, recording of unanticipated sequelae such as failure to remove planned tissue or organs, unplanned removal of tissue or organs, displacement of tissue or organs to abnormal sites, unusual blood loss, etc., and absence of lacerations and other surgical or non-surgical defects.

### Supportive Care

- Management of the oral surgery patient requires many adjunctive elements related to a surgical treatment or as the sole service provided.
- Non-surgical treatment of temporomandibular joint abnormalities directed toward elimination of etiologic factors as well as alleviation of symptoms whether in support of surgical treatment or as the primary means of treatment.
- Appliances for the immobilization of oral structures to provide good stabilization of the intended parts, whether in treatment of traumatic injury, as adjunctive care in oncologic surgery, or other conditions requiring such appliances. Minimal injury to the tissues is cause by the appliances.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

## ORAL AND MAXILLOFACIAL SURGERY

		QUALITY EVAL	LUATION RATING SYSTEM		
		Rating	Operational Explanation		
S A T I S F A	R ROMEO	Range of Excellence Code: R Call: Romeo	Treatment rendered is of satisfactory quality in all aspects.		
C T O R Y S SIERRA	Range of Acceptability Code: S Call: Sierra	Treatment rendered is of acceptable quality and improved the patient's condition, but exhibits one or more features which deviate from the ideal.			
N O T S A	TANGO	Requires Treatment for Prevention or Correction  Code: T Call: Tango	Treatment rendered does not alleviate the patient's disease processes or causes reversible sequelae requiring further treatment.		
T I S F A C T O R Y	V	Correct or Repeat Statim (if not irreversible condition) Code: V Call: Victor	Treatment is not of acceptable quality. Damage to the patient has been done or is now occurring and/or irreversible sequelae exist.		

## ORAL AND MAXILLOFACIAL SURGERY

	QUALITY E	VALUA	TION CRITERIA AND ABBREV	IATIONS	
Code	Preventive Measure	Code	Therapeutic Measures	Code	Supportive Measures
	Satisfactory preventive measures have been accomplished.		Treatment has been completed with adherence to acceptable surgical principles for tissue management, completion of the procedures and avoidance of post operative unacceptable sequelae.		Provisions are made for postoperative care and for treatment of complications. Written reports are made to referring practitioner for patients seen on consultation. Directions are given for home care in the treatment not requiring active therapy. Management of oral physical therapy is directed whether carried out by the patient, auxiliary staff, or professionals.
	(Refer to General Guidelines)		(Refer to General Guidelines)		(Refer to General Guidelines)
SPV	One or more aspects of <b>prevention</b> have been neglected but treatment has been successful and no emergency conditions developed. No teeth were extracted except for good reason. Patients are treated with respect and observation of treatment is continued for unresolved conditions. Patients area adequately instructed in their continuing needs.	SMN S SMN B SPN SES SFN SDV	Minimal necrosis of surgical flaps or exposure of bone resulted but required no intervention to permit normal healing. Pain, alteration for esthetics, and/or loss of function are of a temporary nature and required minimal further treatment. Indicated surgery was accomplished with minor, but indicated deviation or exception.	SSU	Sufficient supportive measures are provided the patient to prevent serious morbidity from developing unnecessarily although some supportive aspects were not provided.
TEMS  TCS TINF TLO TIM	Numerous aspects of prevention are ignored leading to inadequate <b>management</b> of emergency conditions, or unwarranted exposure of patient to dangerous medical <b>complications</b> , or preventable <b>infections</b> , or unjustified <b>loss</b> of teeth, or neglect of <b>incompletely</b> resolved oral	TNC TBN TPN TES TFN	Necrosis of surgical flaps or exposure of bone resulted and caused delay in healing and/or required considerable treatment. Excessive pain, loss of esthetics, and/or loss of function resulted and required extensive treatment for correction. Indicated treatment	TMOT TDL	Neglect of any feature of supportive care which resulted in unnecessary <b>morbidity</b> or <b>delayed</b> recovery.
TDL	disease problems, or inexcusable delay in diagnosis of possible oral malignancies, or unnecessary	TCM	was not carried to <b>completion</b> and required retreatment.		
TPN VNP	apprehension and <b>pain.</b> No <b>plan</b> for emergencies exists, or	VSO	Significant soft tissue or bony		Neglect of any feature of
VNO VNE	oxygen and other emergency supplies or equipment are not available, or no personnel are trained or knowledgeable in management of medical emergencies, or standards of	VBN VPN VES VFN VEX	injury resulted in unnecessary loss of organs, or <b>Permanent</b> suffering, or loss of <b>esthetics</b> and/or <b>function</b> resulted. <b>Wrong</b> teeth were extracted, or other surgery performed without	VCD	supportive care subjecting the patient to a deterioration of the condition.
VAS VJU VPVN	asepsis are not observed, or teeth are indiscriminately removed without concern or good judgment, or no provision is made for advice to patients with possibly dangerous medical conditions, or form of treatment or patient management is inadequate in respect to dignity, or pain persists.	VNI	indication.		

## **ORAL SURGERY**

Patient:				1	Dentist:
Date of Examination:					xaminer:
Treatment in Question:					
Radiographs taken at examination	on?	Yes	N	lo	Date & Type radiographs reviewed:
Describe radiographic findings:					
Describe general periodontal hea	alth	:			
Additional Complaints:					
Remarks to Patient: Patient told					
1. Additional		2. Im	media	ıte	3. Emergency
CLINICAL SUMMARY: Satist	fact	ory/Un	satisf	actory	(circle one)
State reason for above summary	:				
·					
Operational Explanation R - Range of excellen S - Satisfactory T - Unsatisfactory, fur V - Unsatisfactory, da	ture				
Extractions:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		le one		Comments/Observations
Appropriateness of treatment	R	S	T	V	
Completeness of Extraction	R	S	T	V	
Tissue Management	R	S	T	V	
Pathology:		(circ	le one	e)	Comments/Observations
Diagnosis	R	S	Т	V	
Surgical Techique	R	S	Т	V	
Referrals and Supportive Care		S	Т	V	
	К				
TMJ:		(circ	le one	e)	Comments/Observations
Surgical	R	S	T	V	
Non Surgical	R	S	T	V	
Appliances	R	S	T	V	
Trauma:		(circ	le one	<del>(</del> )	Comments/Observations
Appropriateness of Treatment	R	S	T	V	
Diagnosis	R	S	T	V	
Supportive Care	R	S	T	V	

## **Operative Dentistry**

#### General Guidelines

Operative dentistry includes the restoration of hard tooth structure lost as a result of caries, erosion, attrition or trauma.

Since many of the features of operative dentistry are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

Restorative materials for operative dentistry include dental amalgam, composite and non-composite resin materials, gold foil, cast restorations (inlays or onlays) and porcelain or ceramic inlays or onlays as well as various temporary or intermediate materials usually classified as cements.

The dentist's choice of restorative material for a given patient depends upon the nature and extent of the defect to be restored, its location in the tooth and in the mouth, the stress distribution expected during mastication and the aesthetic requirements. Treatment with dental amalgam, or composite or non-composite resin restorative materials/porcelain inlays/onlays may be contraindicated when:

- The restoration will receive excessive masticatory force that might fracture the remaining tooth structure or restoration
- When the restoration would be aesthetically unacceptable
- Treatment in question would cause abrasion to opposing dentition

Treatment with cast and/or porcelain restorations may be contraindicated in:

- Patients with high caries activity and/or poor oral hygiene
- When there is no clear indication that restoring the tooth with a cast and/or porcelain restoration will be effective
- When the restorations may cause damage or adversely affect the prognosis for the tooth or adjacent teeth

Treatment with a bonded composite or ceramic restoration may be contraindicated when:

• Operative conditions and/or marginal placement may not permit an acceptable environment for bonding a restoration.

The patient's age, health and general condition and hygiene of the oral cavity as well as the patients' wishes and attitude must also be considered in the dentists' choice of restorative material.

The clinical quality of operative dentistry depends not only upon the proper choice of materials for a given restoration, but also upon strict adherence to good technique on the part of the dentist and his auxiliary personnel, as the properties of most restorative materials are highly susceptible to manipulative variations.

Bleaching is the treatment of a discolored tooth or teeth in an attempt to restore the natural shade and translucency. Bleaching is also used as an esthetic enhancement to teeth or teeth's natural shade. Patients should be advised of possible consequences of bleaching with regards to teeth, periodontium and existing restorations.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

## **OPERATIVE DENTISTRY**

			UATION RATING SYSTEM
		Rating	Operational Explanation
S A T I S F A	R ROMEO	Range of Excellence Code: R Call: Romeo	The restoration is of satisfactory quality and is expected to protect the tooth and the surrounding tissue.
T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The restoration is of acceptable quality, but exhibits one or more features which deviate from the ideal.
N O T S A T I S F	TANGO	Requires Treatment for Prevention or Correction  Code: T Call: Tango	The restoration is not of acceptable quality. Future damage to the tooth and/or its surrounding tissues is likely to occur.
A C T O R Y	V	Correct or Repeat Statim (if not irreversible condition)  Code: V Call: Victor	The restoration is not of acceptable quality. Damage to the tooth and/or its surrounding tissue is now occurring.

## **OPERATIVE DENTISTRY**

	QUALITY EVALUATION RATING SYSTEM				
Code	Surface and Color Surface of restoration is smooth. No irritation of adjacent tissue.  No mismatch in color, shade and/or translucency between restoration and adjacent tooth structure.*  (Refer to General Guidelines)	Code	Anatomic Form  Restoration's contour is continuous with existing anatomical form, restores contours, cusps, planes, grooves, marginal ridges and functional contact.  (Refer to General Guidelines)	Code	Margin Integrity No visible evidence of ditching along the margin.  No discoloration on the margin between the restoration and tooth structure.*  (Refer to General Guidelines)
SMM	Surface of restoration is slightly <b>rough</b> or pitted, (can be refinished). <b>Mismatch</b> between restoration and tooth structure within the normal range of tooth color, shade, and/or translucency.*	SUCO SOC SOH SMR SCO SFA SLG SPX SOCO	Restoration is slightly undercontoured, or Occlusal contour not continuous with that of cusps and planes, or Occlusal height reduced locally (not in toto), or Marginal ridges slightly under-contoured (low), or Contact slightly open (may be self-correcting), or Facial flattening, or Lingual flattening, or Interproximal cervical area slightly under-contoured, or Restoration is slightly overcontoured, but excess material could be removed.	SCR SDIS	Visible evidence of ditching along the margin not extending to the DE junction.  Discoloration on the margin between the restoration and the tooth structure.*
TMM	Surface deeply pitted; irregular grooves (not related to anatomy); cannot be refinished.	TUCO TDE TBA TOC TCO TPX TOCO TOV	Restoration is <b>under-contoured</b> ; or <b>dentin</b> or <b>base</b> is exposed, or <b>occlusion</b> is affected, or <b>contact</b> is faulty (self-correction is unlikely), or <b>interproximal</b> cervical area under-contoured; tissue damage likely, or Restoration is <b>over-contoured</b> ; Contour cannot be adjusted properly, or there is marginal <b>over-hang</b> .	TMD TMB TPEN	Ditching along the margin is extending to the DE junction. Ditching along the margin is extending to the center base.  Discoloration has penetrated along the margin of the restorative material in pulpal direction.*
VSF SFK VUN	Surface is <b>fractured</b> or <b>flaking</b> . <b>Esthetically displeasing</b> color, shade and/or translucency.*	VMIS VTO VPN	Restoration is <b>missing</b> or <b>traumatic occlusion</b> , or restoration causes <b>pain</b> in tooth or adjacent tissue.	VMD VFR VCAR VTF	Restoration is mobile or fractured, or Caries contiguous with the margin of restoration, or tooth structure fractured.

<sup>\*</sup>Criteria apply to anterior restorations.

### OPERATIVE DENTISTRY

Patient:	
Date of Examination: Examiner:	
Treatment in Question:	
Radiographs: Taken at Exam? YesNo Reviewed:	
Describe radiographic findings:	
Describe general periodontal health:	
Patient's Contribution:	
General health:	
Remarks: (wishes and attitudes)	
Additional Complaints:	
Remarks to Patient: Patient told to seek treatment. Yes No	1. Additional 2. Immediate 3. Emergency
CLINICAL SUMMARY: Satisfactory/Unsatisfactory (circle one)	
State reason for above summary:	
Operational Explanation	Comments/Observations
R - Range of excellence S - Satisfactory	
T - Unsatisfactory, future damage is likely to occur	
V - Unsatisfactory, damage to patient is now occurring <b>Tooth / Treatment</b>	Comments/Observations
Perio Pockets	Comments, Cost various
Mobility & Furca	
(circle one)	
Shade R S T V	
Surface Texture R S T V	
(circle one)	
Contours R S T V	
Marginal Ridge R S T V	
Occlusion R S T V	
Contacts R S T V	
(circle one)	
Margins R S T V	
ividigins K 5 1 V	
Tooth / Treatment	Comments/Observations
Perio Pockets	
Mobility & Furca	

(circle one)	
Shade R S T V	
Surface Texture R S T V	
(circle one)	
Contours R S T V	
Marginal Ridge R S T V	
Occlusion R S T V	
Contacts R S T V	
(circle one)	
Margins R S T V	
TD 4 / TD 4	
Tooth / Treatment	Comments/Observations
Perio Pockets	
Mobility & Furca	
(circle one)	
Shade R S T V	
Surface Texture R S T V	
(circle one)	
Contours R S T V	
Marginal Ridge R S T V	
Occlusion R S T V	
Contacts R S T V	
(circle one)	
Margins R S T V	
Tooth / Treatment	Comments/Observations
Perio Pockets	
Mobility & Furca	
(circle one)	
Shade R S T V	
Surface Texture R S T V	
(circle one)	
Contours R S T V	
Marginal Ridge R S T V	
Occlusion R S T V	
Contacts R S T V	
(circle one)	
Margins R S T V	

## **Crowns and Fixed Partial Prosthodontics for Restoration of Dental Implants**

#### **General Guidelines**

The restoration of dental implants differs in many ways from the restoration of teeth, and as such, the guidelines for the restorations of dental implants have separate guidelines.

A thorough history and clinical examination leading to the evaluation of the patient's general health and diagnosis of his/her oral condition must be completed prior to the establishment of an appropriate treatment plan. Care must be exercised when restoring dental implants so that the occlusal and lateral loading of the prosthesis does not damage the integration of the dental implant system to the bone or affect the integrity of the implant system itself. Care must also be exercised when designing the prosthesis so that the hardness of the material used is compatible with that of the opposing occlusion.

Since many of the features of evaluation in crowns and fixed partial Prosthodontics are common to all dental practice, they will not be discussed in detail in this section. (See Crown and Fixed Partial Prosthodontics Section). Only those aspects that have specific importance for this area will be included.

A conservative treatment plan should be considered prior to providing a patient with one or more implants. Crown(s) and fixed partial prosthetics for dental implants may be contraindicated for the following reasons:

- Poor oral hygiene and tissue management by the patient
- Inadequate osseo-integration of the dental implant(s)
- Excessive para-function or occlusal loading
- Poor positioning of the dental implant(s)
- Excessive loss of bone around the implant prior to the restoration
- Mobility of the implant(s) prior to placement of the prosthesis
- Inadequate number of implants or poor bone quality for long span prosthetics
- When the patient is under 16 years of age unless unusual conditions prevail
- Excessively cantilevered pontic

The appearance of fixed prosthetics appliances for implants may vary considerably depending on the location, position and number of implants to be restored. However, the appearance of the appliances must be appropriate to meet the functional and esthetic needs of the patient.

The appearance and shape of the fixed prosthetics must exhibit contours that are in functional harmony with the remaining hard and soft tissues of the mouth. They must exhibit good design form to facilitate good oral hygiene, even in cases where the prosthesis may have a ridge lap form.

Jaw relationship and intra arch vertical distance should be considered in the initial treatment plan and selection of retentive and restorative appliances.

Fixed implant prosthetics must incorporate a strategy of removal of the appliance without damage to the implant, or adjacent dentition, so that the implant can be utilized in cases where there is further loss of teeth, or where repair of the appliance is necessary.

Multiple unit fixed prosthetics for implants must fit precisely and passively to avoid damage to the implants or their integration to the bone.

It is a contra-indication to have a fixed dental prosthesis abutted by both dental implant(s) and teeth (tooth) without incorporating a design to alleviate the stress of an osseo-integrated (non-movable) abutment and that of a natural tooth.

It is the responsibility of the restoring dentist to evaluate the initial acceptability of the implants prior to restoration.

It is the responsibility of the restoring dentist to instruct the patient in the proper care and maintenance of the implant system and to evaluate the patient's care initially following the final placement of the prostheses.

Fixed partial prostheses, as well as a single unit crowns are expected to have a minimum prognosis of five years of service.

Patient also has responsibility to return for further adjustments.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

## Fixed Prosthodontics, Veneers, Crowns and Fixed Bridges

#### General Guidelines

Fixed prosthetics includes the following acceptable restorations: full crowns, seven-eighths crowns, three-quarter crowns, onlays and veneers. Materials include porcelain or plastic hybrids used as a single material or in combination with acceptable cast metals.

A thorough history and clinical examination leading to the diagnosis of the patient's general and oral condition must be completed before establishing a treatment plan. Care must be exercised when placing restorations so that the hardness of the material used is compatible with that of the opposing dentition.

Since many of the features of evaluation in fixed prosthodontics are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

A conservative treatment plan should be considered prior to providing a patient with one or more units. Amalgam or composite restorations may be inappropriate for the following reasons:

- 1. The restoration will receive excessive masticatory force that might fracture the remaining tooth structure or restorations.
- 2. There is a fractured or missing cusp or incisal edge.
- 3. Significant amount of the tooth surface is a series of restorations (amalgam, silicate or composite) one or more of which is defective or an additional carious lesion is present.
- 4. There is gross decay on all tooth surfaces.
- 5. Tooth with completed root canal therapy that cannot be restored and maintained with amalgam, silicate or composite materials.
- 6. Patient has a significant loss of vertical dimension of tooth structure with heavily abraded occlusal surfaces and corrective equilibration will not stop further loss of tooth structure.
- 7. Patient has a failing crown, which can only be restored by another crown.
- 8. The teeth are to be splinted.

A final restoration of a tooth or teeth that require endodontic and/or periodontal treatment should be postponed until a favorable prognosis for the retention of the tooth or teeth has been established.

The patient's age, health and general condition of the oral cavity, as well as the patient's wishes and attitude must also be considered. Fixed restorations must be incorporated in the treatment plan in the appropriate sequence in relation to endodontic, periodontic and surgical procedures.

When serious, unsightly tooth appearance exists, veneers, porcelain or plastic jacket crowns often combined with metal may be used to improve esthetics and are acceptable restorations when esthetics is the primary concern.

Restorations should exhibit contours that are in functional harmony with adjacent teeth and soft tissues, exhibiting good individual anatomic form; no food traps or soft tissue irritation are present and design should facilitate good oral hygiene.

Fixed partial prostheses (bridges) are indicated for replacement of one or more missing teeth when abutment teeth can be expected to have a minimum prognosis of five years of service.

Crowns as well as fixed partial prostheses (bridges) are contraindicated when:

- 1. The necessary operative procedures impair the patient's oral health.
- 2. The necessary operative procedures inhibit growth and development.
- 3. When there is no clear rationale for improving or stabilizing present dental function.
- 4. When the patient is under 16 years of age unless unusual conditions prevail.

Esthetic treatment of anterior dentition is predicated upon case selection and treatment planning. It is of critical importance that the case selection have a determination involving periodontal health, caries incidence, occlusion, orthodontic considerations, dental habits, prior esthetic evaluation, and realistic patient expectations.

Treatment planning should consider most of the following:

- 1. Diagnosis
- 2. Radiographs
- 3. Diagnostic models/photographs, if necessary
- 4. Periodontal considerations should include:
  - a. Minimal pocket depth
  - b. Oral hygiene instructions
  - c. Generalized good periodontal health
  - d. Areas to be treated should be scaled thoroughly prior to bonding and veneering
  - e. Any periodontal treatment anticipated should be completed prior to bonding and veneering
- 5 Caries incidence considerations:
  - a. High caries contraindication for veneers due to possibility of secondary caries
  - b. Low caries acceptable for treatment with veneers

#### 6. Occlusion:

- a. Possible contraindications include bruxism, clenching, wear facets, fractured teeth, tooth mobility, temporomandibular joint dysfunction. If these contraindications are considered and acceptable treatment is applied, then the degree of contraindication is diminished.
- b. The type of restoration selected should anticipate occlusal disharmonies/harmonies to the extent that the bonding, veneering, porcelain crown, or porcelain/metal crown are clearly indicated as an appropriate treatment for the current condition.

#### 7. Orthodontic considerations:

- a. It is to be understood that bonding and veneers are esthetic enhancements and not orthodontic treatment. Malocclusions remain malocclusion, but can be made more esthetic. The treatment of malocclusions should involve orthodontic therapy as indicated.
- 8. Treatment must be incorporated into the treatment plan in the appropriate sequence in relation to endodontic, periodontic, orthodontic, and any surgical procedures.
- 9. The restorations, whether bondings or veneers, should exhibit contours that are in functional harmony with the adjacent teeth and soft tissues, and should exhibit good individual anatomic form. Minimal food traps or soft tissue irritation should be present. The design should facilitate good oral hygiene.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

# FIXED PROSTHODONTICS, VENEERS, CROWNS AND FIXED BRIDGES

	QUALITY EVALUATION RATING SYSTEM				
	1	Rating	Operational Evaluation	Code	Indications
S A T I S	R ROMEO	Range of Excellence Code: R Call: Romeo	The restoration is of satisfactory quality and is expected to protect the tooth and the surrounding tissue.		Crown or fixed partial prosthesis is the optimal restoration of choice.  (Refer to General Guidelines.)
F A C T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The restoration is of acceptable quality, but exhibits one or more features which deviate from the ideal.	SCA	A more conservative restoration could be placed, but a crown or fixed partial prosthesis is acceptable.
N O T S A T I S F	TANGO	Not Acceptable Rationale Questionable Code: T Call: Tango	The restoration is not of acceptable quality. Future damage to the tooth and/or its surrounding tissues is likely to occur.	TNI TDM TPR	No clear indication for crown, or fixed partial prosthesis. Restorations may cause damage or adversely affect the prognosis for tooth or teeth.
A C T O R Y	V VICTOR	Not Acceptable Inadequate Code: V Call: Victor	The restoration is not of acceptable quality. Damage to the tooth and/or its surrounding tissue is now occurring.	VOT VCND	Crowns are made without consideration of <b>other treatment</b> possibilities, or <b>Special conditions</b> requiring reevaluation are <b>not discovered</b> or taken into consideration.

# FIXED PROSTHODONTICS, VENEERS, CROWNS AND FIXED BRIDGES

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS				
Code	Surface and Color	Code	Anatomic Form	Code	Margin Integrity
	The surface of the restoration(s) is smooth. No irritation of adjacent tissue is occurring. There is no mismatch in color shade and/or translucency between the restoration(s) and adjacent teeth.*  (Refer to General Guidelines.)		Restoration contour is in functional harmony with adjacent teeth and soft tissues with good individual anatomic form.  (Refer to General Guidelines)		No visible evidence of a crevice along margin into which explorer will penetrate. Satisfies operative dentistry principles of margin placement wherever possible. No discoloration on the margin between the restoration and the tooth structure.*  (Refer to General Guidelines.)
SRO	Surface or restoration is slightly <b>rough</b> or pitted; can be polished.	SOCO SUCO	Restoration is slightly over contoured, or Restoration slightly under-countoured, or	SCR	Visible evidence of slight marginal discrepancy with no evidence of decay; repair can
SMM	Slight mismatch between shade of restoration(s) and adjacent tooth or teeth.*	SOH SMR SCO SFA SLG SAF	Occlusion is not totally functional, or Marginal ridges slightly undercontoured, or Contact slightly open, or Facial flattening is present, or Lingual flattening is present.  Anatomic form of pontic may cause food retention: No irritation of soft tissue.	SDIS	Discoloration on the margin between the restoration and the tooth structure.*
TGI	Surface <b>grossly irregular</b> not related to anatomy and not subject to correction. <b>Mismatch</b> between restoration(s) and adjacent tooth or teeth outside the normal range of color, shade,	TUCO TOCO TET TCO TVO TAF	Restorations grossly under- contoured, or Restorations grossly over- contoured, or Occlusion is affected, or Contact is faulty, or There is marginal overhang, or Anatomic form of pontic is likely to result in food retention causing	TFAM TPEN TCEM	Faulty margins that cannot be properly repaired.  Penetrating discoloration along the margin of the restoration in pulpal direction.*  Retained excess cement.
VSF VGP VSD	Surface is <b>fractured</b> , <b>porosities</b> in the crown material.  Shade in <b>gross disharmony</b> with adjacent teeth.*	VTO VUO VPN VDM	irritation to soft tissue and/or caries in abutment teeth.  Traumatic occlusion, or Gross under-occlusion, or Restoration causes unremitting pain in tooth or adjacent tissue, or Damage is now occurring to tooth, soft tissue or supporting bone.	VMO VFR VCAR VTF	Mobile restoration, or Fractured restoration, or Caries continuous with margin of restoration, or Tooth structure fractured.

<sup>\*</sup> Criteria apply to anterior restorations

# FIXED PROSTHODONTICS, VENEERS, CROWNS AND FIXED BRIDGES

Patient: Dentist:	
Date of Examination: Examine	er:
Treatment in Question:	
Radiographs taken at examination? Yes No Date	& Type radiograph(s) reviewed:
Describe radiographic findings:	
Describe general periodontal health:	
Patient's Contribution:	
General health:	
Remarks: (wishes and attitudes)	
Additional Complaints:	
Remarks to Patient:	Patient told to seek treatment. Yes No
1. Additional2. Immediate	3. Emergency
State reason for above summary:	
Operational Explanation  R - Range of excellence S - Satisfactory	Comments/Observation
Operational Explanation R - Range of excellence	Comments/Observation
Operational Explanation  R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur	Comments/Observation
Operational Explanation  R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment	Comments/Observation
Operational Explanation  R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca  (circle one)	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca  (circle one) Shade R S T V	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca  (circle one) Shade R S T V Surface Texture R S T V	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca  (circle one) Shade R S T V Surface Texture R S T V (circle one)	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment  Perio Pockets  Mobility & Furca  (circle one)  Shade R S T V  Surface Texture R S T V  (circle one)  Contours  R S T V	Comments/Observation
Operational Explanation R - Range of excellence S - Satisfactory T - Unsatisfactory, future damage is likely to occur V - Unsatisfactory, damage to patient is now occurring  Tooth & Treatment Perio Pockets Mobility & Furca  (circle one) Shade R S T V Surface Texture R S T V  (circle one) Contours R S T V Occlusion R S T V	Comments/Observation

Tooth & Tre	eatment	Comments/Observations
Perio Pockets		
Mobility & Fu	rca	
	(circle one)	
Shade	R S T V	
Surface Textur	re R S T V	
	(circle one)	
Contours	R S T V	
Occlusion	R S T V	
Contacts	R S T V	
	(circle one)	
Margins	R S T V	
Tooth & Tre	atment	Comments/Observations
Perio Pockets		
Mobility & Fu	rca	
	(circle one)	
Shade	R S T V	
Surface Textur	re R S T V	
	(circle one)	
Contours	R S T V	
Occlusion	R S T V	
Contacts	R S T V	
	(circle one)	
Margins	R S T V	
Tooth & Tre	eatment	Comments/Observations
Perio Pockets		
Mobility & Fu	rca	
	(circle one)	
Shade	R S T V	
Surface Textur	re R S T V	
	(circle one)	
Contours	R S T V	
Occlusion	R S T V	
Contacts	R S T V	
	(circle one)	
Margins	R S T V	

### **Removable Partial Prosthodontics**

#### General Guidelines

Removable partial prosthodontics is that part of dental practice which deals with the restoration of the occlusion by means of removable appliances which may be either entirely tooth supported or tooth and tissue supported. The appliance generally derives its support principally from tissues underlying its base with a lesser amount of support from some remaining teeth.

Removable partial prostheses are indicated when the initial history, clinical examination and diagnosis reveal conditions that contraindicate replacement of missing teeth with fixed prosthetic appliances or when individual patient factors preclude fixed or implant retained prosthetic restorations.

Since many of the features of evaluation in removable partial prosthodontics are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

A removable partial denture is normally not indicated for a single tooth replacement as a permanent restoration, or as a replacement of non-functional second and third molars.

Properly constructed fixed restorations are usually more physiologically and psychologically acceptable to the patient. Conditions that may contraindicate fixed restorations are:

- Replacement of two or more teeth when distal abutment tooth is missing
- Replacement of missing teeth in cases of periodontal involvement of remaining teeth with unfavorable prognosis
- Replacement of an anterior tooth or teeth immediately following extractions when a temporary plastic appliance will provide adequate esthetics during the healing period.
- Use as a provisional appliance where final diagnosis cannot be made
- Replacement of missing anterior teeth where esthetics are better served by a removable partial denture
- Where edentulous areas are too extensive and/or resorbed to be successfully restored by fixed partial prostheses

*Materials* used for removable partial prostheses must be strong enough to resist distortion or breakage during normal function, non-porous, color stable, aesthetically pleasing, non-toxic and non-abrading to the opposing or supporting dentition.

A flexible partial must preserve the health of the existing teeth and not affect the periodontium detrimentally, as well as satisfy an esthetic and functional need.

*Design* should provide for satisfactory saddle area coverage, functional stability, non-interfering functional occlusion and passive retention when not in function. Consideration should always be given to bilateral support of removable partial prostheses. Appliances are designed to cause no damage to abutment teeth and/or periodontal tissues, and to facilitate oral hygiene.

The prostheses should function passively, fit the natural teeth accurately, be well adapted to the soft tissues and provide increased masticatory function for the patient.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

# REMOVABLE PARTIAL PROSTHODONTICS

	QUALITY EVALUATION RATING SYSTEM								
		Rating	Operational Explanation	Code	Indications*				
S A T I S F A C T O R Y	R ROMEO	Range of Excellence Code: R Call: Romeo	Appliance is satisfactory in function, design, indication, and materials used for construction.		Removable partial prosthesis is the optimal restorative choice.  (Refer to General Guidelines.)				
	S SIERRA	Range of Acceptability Code: S Call: Sierra	Appliance is of acceptable quality, but exhibits one or more features which deviate from the ideal.	SSR	Single (separate) tooth replacement as a permanent restoration where no damage is occurring to adjacent teeth or supporting structures.				
	T TANGO	Not Acceptable Rationale Questionable Code: T Call: Tango	Appliance is not of acceptable quality and may lead to future damage to remaining teeth and/or surrounding tissue.	TNF	Replacement of <b>non-functional</b> second and/or third molars.				
	V VICTOR	Not Acceptable Inadequate Code: V Call: Victor	Appliance is not of acceptable quality. Damage to the teeth and/or their surrounding tissues is now occurring.	VHC VDM	High caries index where no attempt has been made to reduce caries susceptibility. Single tooth replacement where damage is occurring to adjacent teeth or supporting tissues.				

13-3 Rev: 09/21/10

# REMOVABLE PARTIAL PROSTHODONTICS

	QUALITY EV	ALUAT	TION CRITERIA AND ABBI	REVIAT	TIONS
Code	Materials Used	Code	Design	Code	Function
	Material is non-toxic, color stable, non-porous, aesthetically pleasing, of satisfactory strength, and does not abrade opposing dentition Refer to General Guidelines.)		Saddle areas covered adequately. Tissue bearing areas exhibit normal tone. Causes no damage to abutment teeth and periodontal tissues and facilitates oral hygiene.  (Refer to General Guidelines)		Functions passively. Fits natural teeth accurately.  Stable during function.Non-interfering functional occlusion.  (Refer to General Guidelines.)
SES SAB	Esthetics are acceptable but not pleasing, patient is satisfied, or material has slightly abraded opposing dentition.	SSA SIF SIQ	Saddle areas are inadequate but can be relined to render appliance satisfactory, or Minor occlusal interferences or inadequacies that can be corrected, or Teeth	SRT STA	Retention modes out of proper adjustment can be adjusted, or Tissue adaption fair, saddle areas can be relined to render appliance satisfactory.
		SFN SIR SMC	can be reset to adjust <b>function</b> , or Soft tissue <b>irritation</b> that can be corrected by adjusting appliance. Excessive space between <b>major connector</b> and tissue, but patient is comfortable.		appriance satisfactory.
TAL TRP	Allergy to materials used is observed, or Materials used cannot be repaired, or Unusual	TSA TSTB	Inadequate <b>saddle area</b> extension and lack of <b>stability</b> has caused chronic soft or hard tissue damage	TRT TDS	Inadequate <b>retention</b> that can not be made satisfactory, or <b>Displacement</b> during function,
	tendency for breakage, or		that cannot be corrected by	TFR	or Unsatisfactory distribution
TBRK TWRP	Warping during normal wear or <b>Discoloration</b> is Visible when		adjusting appliance, or Appears to be potential cause of	TTR	of forces during function, or <b>Torque</b> forces on natural teeth
TDIS	appliance is in the mouth, or Material is <b>porous</b> ; may cause	TPAT TOC	oral <b>pathology</b> , or <b>Occlusal inadequacies</b> are not		upon insertion and removal of appliance, or
TGP	tissue irritation, or Material has slightly abraded opposing dentition with future damage	TOHY TMC	correctable, or Design doesn't facilitate <b>oral hygiene</b> . Excessive space between <b>major connector</b>	TFN	Does not aid <b>function</b> .
TAB	likely.		and tissue causing discomfort.		
VWR	Unusual wear of surfaces		Appliance unintentially inducing	VPN	Periodontitis, or
VAB	during normal, or Evidence of severe abrasion of opposing dentition.	VTM VBR	tooth movement or displacement, or Severe bone resorption has	VPN	Pain in abutment teeth is inducted by Wearing of appliance, or Wearing of
		VPD VCAR	occurred under saddles, or Severe periodontal tissue damage, or caries has occurred, or design	VFN VTMN	appliance decreased <b>function</b> , or Appliance causes <b>TMJ</b> problems.
		VHY	counteracts good oral hygiene.		•

<sup>\*</sup> Criteria apply to anterior restorations.

13-4 Rev: 09/21/10

### REMOVABLE PARTIAL PROSTHODONTICS

Patient:			Dentist:					
Date of Examination:				Examiner:				
Treatment in	n Quest	tion:	_					
Radiographs	s: Take	n at l	Exan	nination?	Yes	_ No	Date of	& Type radiographs reviewed:
Describe rac	diograp	hic f	indin	ıgs:				
Describe ge	neral p	eriod	lontal	health:				
General hea	lth:							
Remarks: (v	vishes a	and a	ittituc	des)				
Additional (	Compla	ints:						
Remarks to	Patient	::						Patient told to seek treatment. YesNo
1. Additiona	ıl				2. Immed	liate		3. Emergency
CLINICAL	SUMN	/AR	Y: S	atisfactor	y/Unsatis	factory (circle	e one)	
State reason	for ab	ove s	summ	nary:				
S - T -	Range Satisfa Unsati	of e octor	xcell y tory,	future da		kely to occur		
Maxillary P	artial					Comments/Observations		
Mandibular	Partial							
Periodontal	Status	of A	butm	ents				
Clasps Tooth #s								
Replacing Tooth #s								
Design	(ci	rcle o	one) T	V				
Saddles	R	S	T	V				
Stability	R	S	T	V				
Retention	R	S	T	V				
Occlusion	R	S	T	V				

13-5 Rev: 09/21/10

# **Complete Denture Prosthodontics**

#### General Guidelines

Complete dentures are the restoration of last resort. They are indicated as a treatment procedure only when the prognosis for the remaining teeth is hopeless, when any remaining teeth will not adequately support a prosthesis or when all upper or lower teeth have been removed.

Since many of the features of complete denture prosthodontics are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

Complete dentures are important not only for improved mastication of food, but also for proper facial appearance and speech. The construction of complete dentures is as much an art as it is a science. The psychological management of the patient may be of greater importance than the technical aspects of the complete denture service. Technically acceptable dentures may be a complete failure because the psychological limitations of the patient were not recognized. In situations where findings do not meet satisfactory criteria but where a patient is completely satisfied with function and appearance and no pathology is present, the denture is considered to be satisfactory.

Severely handicapped edentulous patients, with either physical, mental, or with recognizable emotional problems, may require special procedures based upon the problems they present. Patients should be referred for treatment of conditions beyond the skills of the treating dentist.

Aesthetically, the denture should harmonize with the patient's facial appearance. Position, size and shade of teeth should appear natural and unobtrusive. The color and the shade of the denture base material should appear natural and unobtrusive.

Complete dentures should exhibit proper peripheral seal at the mucobuccal fold and cover those areas of the arches that provide maximum support.

- 1. The maxillary denture should cover the entire hard palate, with a postdam that extends from the hamular notch to form a posterior seal on the soft palate without evidence of inflammation or ulceration.
- 2. The mandibular denture should have full posterior flanges, normally extending to or beyond the floor of the mouth and extending distally to include a portion or all of the retromolar pad.
- 3. The denture base material should adapt closely to the soft tissues and extension should achieve stability without evidence of inflammation or ulceration.

Centric occlusion should be in harmony with centric jaw relation in the most closed position of the teeth. The vertical dimension of the occlusion should be within the physiologic tolerance of the patient. Inter-occlusal contacts should be evenly distributed with no occlusal interference in lateral or protrusive excursions. The dentures should remain seated when biting pressure is applied in the anterior and posterior segments of the arch and during talking and smiling.

14-1 Rev: 09/21/10

A single full denture opposing natural or implant retained, restored or removable appliances may present occlusal challenges. Occlusal disharmonies that may affect stability and retention should be considered in the overall evaluation of the denture. Patient also has responsibility to return for further adjustments.

Post-insertion care may involve adjustment of the denture base or the occlusion, or resetting teeth, or changing teeth. It may also involve relining of the denture if there is inadequate adaptation of the denture base to the tissues. The treatment plan should include provision for post-insertion care with the dentist accepting responsibility for rendering this care for a reasonable number of post insertion follow up appointments.

Porcelain or plastic are acceptable materials for artificial teeth. In selected cases, metal occlusal surfaces may be indicated. The use of plastic teeth opposing cast restorations is recommended.

The same guidelines should apply to immediate complete dentures as to remote complete dentures. One exception is the indication in some immediate-denture cases for reduction or eliminating the labial flange of the denture. The dentist has the responsibility of informing the patient of the necessity for modifying the denture at periodic intervals to compensate for the tissue changes which will occur.

In cases where multiple extractions, severe periodontal disease, or alveloplasty make the prognosis for a successful denture poor, an immediate complete denture, transitional prosthesis, may be considered. Such dentures require multiple tissue conditioning liners during the healing process and would be transitional to a new final denture when there is sufficient healing of the tissues.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

14-2 Rev: 09/21/10

# COMPLETE DENTURE PROSTHODONTICS

	QUALITY EVALUATION RATING SYSTEM								
	ı	Rating	Operational Explanation	Code	Esthetics				
S A T I S F A C T O R Y	R ROMEO	Range of Excellence Code: R Call: Romeo	The prosthesis is of satisfactory quality in regard to function and esthetics and its interaction with the surrounding tissue.		Harmonize with patient's facial appearance  Contour and shade of the denture base material appear natural and unobtrusive.  (Refer to General Guidelines.)				
	S SIERRA	Range of Acceptability Code: S Call: Sierra	The prosthesis is of acceptable quality, but exhibits one or more features which deviate from the ideal.	SPSS SCB	Tooth <b>position</b> , <b>size</b> , or <b>shade</b> could look more natural but patient is satisfied with appearance, or <b>contour</b> and/or <b>shade</b> of the denture base material could look more natural but patient is satisfied with appearance.				
N O T S A T I S F A C T O R Y	TANGO	Repeat or Correct for Prevention Code: T Call: Tango	The prosthesis is not of acceptable quality. Future damage is likely to occur.	TPSS TCB	Tooth <b>position</b> , <b>size</b> , or <b>shade</b> are/is not natural and patient is not satisfied with appearance, or <b>contour</b> and/or <b>shade</b> of the denture base material are/is not natural and patient is not satisfied with appearance.				
	V VICTOR	Repeat Statim Code: V Call: Victor	The prosthesis is not of acceptable quality. Damage to the patient is now occurring.		Not applicable.				

14-3 Rev: 09/21/10

### COMPLETE DENTURE PROSTHODONTICS

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS								
Code	Extension	Code	Occlusion	Code	Stability & Retention*				
	Both dentures exhibit proper peripheral seal at mucobuccal fold and cover those areas of the arches that provide maximum support. Denture base material adapts closely to soft tissues without evidence of inflammation or ulceration.		Centric occlusion is in harmony with centric jaw relation in the most closed position of the teeth. The vertical dimension of the occlusion is within the physiological tolerance of the patient. Occlusion is functional and non-interfering.		Dentures remain seated when biting pressure is applied in anterior and posterior segments of the arch. Dentures remain seated during talking and smiling.				
	(Refer to General Guidelines.)		(Refer to General Guidelines.)		(Refer to General Guidelines.)				
SXO SDO SXU SDU	One or both denture(s) are <b>over-</b> <b>extended or under-extended</b> but their function is satisfactory and there is no evidence of tissue irritation.	SCN	Centric occlusion is not correct (but correctable). Vertical dimension is acceptable. No occlusal interference in lateral and protrusive excursions. Occlusal	SXSA SDSA	There is slight movement of the denture(s) when biting pressure is applied in anterior and/or posterior segments of the				
		SFO SDH	surfaces lack anatomic or nonanatomic detail, but masticatory forces are evenly distributed. Occlusal disharmony present, the patient is comfortable and no pathology present.	SXSP SDSP	arch, but the patient is satisfied and has accepted existing retention.				
TXO TDO TXU TDU TPS	One or more denture(s) over- extended, or under-extended, or Perip heral seal is not acceptable, or there is adjacent tissue irritation.	TPO TBK TBT TDH	Occlusal surfaces are not <b>polished</b> properly. Patient <b>bites cheek(s)</b> or <b>tongue</b> upon closure into occlusion. <b>Occlusal disharmony</b> present. Patient is comfortable but potential for future damage likely.	TXLM TDLM	Denture(s) become(s) loose during talking, smiling, or mastication.				
VXO VDO VXU VDU VPS VINF VUL VHP	One or more denture(s) severely over-extended, or severely under-extended, or  Peripheral seal is lacking, or adjacent tissue is inflamed, or ulcerated, or hypertrophied.	VCN VV  VPR  VLI VDP VDC VDL VPI	Centric occlusion is not in harmony with centric jaw relation, or the vertical dimension of occlusion is not within the physiologic tolerance of the patient, or there is premature contact(s) on closure into occlusion, or there is occlusal interference in lateral and/or protrusive excursions, or denture(s) displaced on closure into occlusion, or denture(s) displaced by lateral and/or protrusive excursions.	VXLM VDLM	Denture(s) become(s) <b>loose</b> during talking and/or smiling and/or mastication and the deficiency does not appear to e correctable with conventional means.				

14-4 Rev: 09/21/10

<sup>\* &</sup>quot;X" designation in abbreviations refers to maxillary denture.

\* "D" designation in abbreviations refers to mandibular denture.

# COMPLETE DENTURE PROSTHODONTICS

Patient:		Dentist:						
Date of Examination	on:	Examiner:						
Treatment in Question: Upper (Maxillary) / Lower (Mandibular) Denture								
Patient's Contribut	ion:							
General health:								
Additional Compla	ints:							
Remarks to Patient	:							
Patient told to seek	treatment. Yes No_	<u></u>						
1. Additional	2. Imn	mediate3. Emergency						
CLINICAL SUMM	MARY: Satisfactory/Unsatis	sfactory (circle one)						
State reason for abo	ove summary:							
	anation (circle one)	Comments/Observations						
R - Rang S - Satis	ge of excellence factory							
T - Unsa	tisfactory, future damage is							
V - Unsa	atisfactory, damage to patien	nt is now occurring						
Esthetics:	(circle one)	Comments/Observations						
Facial Harmony	R S T V							
Shade	R S T V							
Teeth	R S T V							
<b>Extensions:</b>	(circle one)	Comments/Observations						
Overextended	R S T V							
Underextended	R S T V							
Peripheral Seal	R S T V							
Occlusion:	(circle one)	Comments/Observations						
	,	Comments/Ouservations						
Centric	R S T V							
Vertical	R S T V							
Lateral	R S T V							
Protrusive	R S T V							
Teeth Surfaces	R S T V							
Stability & Ret	cention: (circle one)	Comments/Observations						
Stability	R S T V							
Retention	R S T V							
	•							

14-5 Rev: 09/21/10

# Removable Complete and Partial Prosthodontics for the Restoration of Dental Implants

#### **General Guidelines**

Removable prosthodontics of dental implants is that part of dental practice which deals with the restoration of the dental implants by means of removable appliances. Dental implant removable prosthesis' may use any one or a combination of implant(s), teeth or tissue for support or retention.

Removable prosthetics for dental implants are indicated when the initial history, clinical examination and diagnosis reveal conditions that contraindicate replacement of missing teeth with fixed prosthetic appliances or implant retained fixed prosthetic appliances or when individual patient factors preclude fixed prosthetic or implant retained fixed prosthetic appliances.

Since many of the features of evaluation in implant retained removable prosthodontics are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

Properly constructed, well retained restorations are usually more physiologically and psychologically acceptable to the patient. Conditions that may contraindicate restoration of dental implants with removable prosthetics are:

- Poor osseo-integration of the implant(s)
- Restoration of a single tooth
- Restoration of third molars
- Excessive loss of bone prior to placement of the prosthesis
- Mobility of the implants prior to placement of the prosthesis
- Poor positioning of the implants

Materials used for implant retained removable prosthetics must be strong enough to resist distortion or breakage during normal function, non-porous, color stable, aesthetically pleasing, non-toxic and not abrasive to the opposing or supportive dentition. They must also provide stress relief to the dental implants during normal occlusal loading.

The design of the prosthesis must incorporate concern for functional stability, stress transfer from the prosthesis to the oral tissues, relief of para-functional stresses, attachment of the prosthesis to the dental implants, facilitate good oral hygiene of the implant system and the prosthesis and a strategy of removal of the implant retention system without damage to the implants, or to the remaining dentition.

15-1 Rev: 09/21/10

The implant retention system must fit securely and passively to the implants and to the removable prosthesis, and the removable prosthesis must function passively, fit the teeth and implant retention system accurately, be well adapted to the soft tissues where applicable and provide increased masticatory function to the patient.

It is the responsibility of the restoring dentist to evaluate the initial acceptability of the implants prior to restoration.

It is the responsibility of the restoring dentist to instruct the patient in the proper care and maintenance of the implant system and to evaluate the patient's care initially following the final placement of the prosthetic.

The removable prosthesis and implant retention system can be expected to have a minimum prognosis of five years.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

15-2 Rev: 09/21/10

### **Pediatric Dentistry**

#### **General Guidelines**

Pediatric Dentistry is that part of dental practice which deals with the growth and development of the dentition and the diagnosis and treatment of dental disease in children and adolescents.

Since many of the features of pediatric dentistry are common to all of dental practice, they will not be discussed in detail in this section. Only those aspects that have specific importance for this area will be included.

There should be particular concern to preserve the primary teeth for masticatory function and space maintenance, utilizing such procedures as pulpal therapy and stainless steel crowns. To preserve adequate space for the eruption of the permanent dentition, both space maintainers and space retainers should be employed judiciously, with particular preference for fixed appliances.

Tooth guidance and regulation of the growth and development of the dentition is also an important feature of pediatric dental care. Patients should be referred for treatment of conditions beyond the skill of the treating dentists.

Excessive and unnecessary treatment should be avoided. For example, carious lesions of primary incisors that will exfoliate within 6-9 months should not be restored unless it is warranted by special circumstances. Routine administration of premedications should be avoided for tractable children. Inhalation sedation and/or premedication may be used selectively when indicated for management of pain and anxiety only with the proper licensure.

Principles and practices of prevention should be employed, such as dietary counseling and plaque control. Topical fluorides should be applied at least annually as part of the prophylaxis and dietary fluorides should be prescribed where the water supplies are deficient. Application of sealants may be utilized where appropriate.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> the peer review examiners.

16-1 Rev: 09/21/10

# PEDIATRIC DENTISTRY

	QUALITY EVALUATION RATING SYSTEM							
		Rating	Operational Explanation					
S A T I S F A C T O R	R Range of Excellence  ROMEO Code: R Call: Romeo		Treatment rendered is of satisfactory quality in all aspects.					
	S SIERRA	Range of Acceptability  Code: S Call: Sierra	Treatment is of acceptable quality but exhibits one or more features which deviate from the ideal.					
N O T S A T I S F A C T O R	T TANGO	Repeat or correct for Prevention Code: T Call: Tango	Treatment is not of acceptable quality. Future damage to the deciduous or permanent dentition is likely to occur.					
	V VICTOR	Repeat or Correct Statim Code: V Call: Victor	Treatment is not of acceptable quality. Damage to the deciduous or permanent dentition is now occurring.					

16-2 Rev: 09/21/10

# PEDIATRIC DENTISTRY

	QUALITY EVALUATION CRITERIA AND ABBREVIATIONS
Code	
	Selection of pediatric procedures (treatment plan) is based on sound diagnostic judgment in order to preserve the natural dentition, provide space maintenance, and includes dietary evaluation, use of fluoride and other preventive measures, as needed. Technical performance conforms to established principles.
SFM	<b>Fixed</b> space <b>maintainers</b> for first primary molar space are placed after eruption into occlusion of first permanent molars, provided space has not already been lost and/or the succeeding bicuspid is still covered by bone.
SRM	<b>Removable</b> tooth guidance appliances and space maintainers are used where a fixed appliance could be placed.
SCD	In deciding the treatment of a carious lesion in a primary tooth, one or more <b>conditions</b> have not been taken into consideration resulting in a less than optimal but completely functional restoration.
TMS TPH TTIM TAG	Masticatory function, or Phonetics, or the remaining time of function of the tooth in question, or the patient's age, or
TERV TOC	the <b>eruption</b> sequence of the permanent dentition, or the <b>occlusion</b> , or
TSP TFL TCW TDIE	the arch <b>space</b> has not been considered when the treatment plan was made.  Prophylaxis is performed without topical <b>fluoride</b> treatment when fluoride treatment indicated.  Inappropriate use of <b>crown(s)</b> when more conservative restorative procedure(s) was possible.  Appropriate <b>dietary recommendations</b> (including prescription of dietary fluoride) have not been made when indicated.
TRF TBM	Removable space maintainers are used where <b>fixed appliances</b> are indicated.  Failure to utilize appropriate behavior management techniques to allow for optimum clinical treatment and psychological acceptance.
VEX	<b>Extraction</b> of primary molars or permanent first molars that could have been retained with proper pulpa therapeutic methods. (Except removal of grossly carious first permanent molar prior to eruption of second molar where the second molar may drift forward to replace the first molar.)
VOC VCW	Inappropriate treatment of <b>malocclusions</b> without adequate diagnosis. <b>Crown(s)</b> damaging to teeth and/or supporting tissues or there is no indication of the necessity for crow replacement.
VORT	Failure to recognize over-retained deciduous teeth.
VORA	Over-retention of fixed space maintainers.
W 7   T   T	Failure to note and treat <b>ectopically erupting</b> first molars causing early loss of second (2 <sup>nd</sup> ) primary molars and subsequent space loss for permanent second (2 <sup>nd</sup> ) bicuspid.
VEE	
VEE VCM	Failure to recognize <b>congenitally missing</b> teeth and not maintaining primary teeth in excellent condition or preparing for future space problems.

16-3 Rev: 09/21/10

### **Orthodontics**

#### **General Guidelines**

Orthodontic treatment ranges from simple space maintenance to comprehensive fixed-appliance therapy. Interceptive procedures, limited tooth movement or guidance, dento-facial orthopedics, orthognathic surgery, and treatment of craniomandibular problems are included in the term "orthodontic treatment". More than one phase of active treatment may be necessary, and removable and/or fixed appliances may be utilized. A satisfactory result of improved esthetics and better occlusion is dependent upon a combination of professional skill and patient cooperation during all phases of treatment.

Many of the criteria for evaluating orthodontic treatment are common to all phases of dentistry and are covered elsewhere. Only those criteria specific to orthodontics will be discussed in this section.

Whenever possible, candidates for orthodontic treatment should be in good oral health. During treatment, every effort should be made to monitor the oral health of the patient and prevent, if possible, the consequences of poor oral hygiene.

Detailed records are essential to every orthodontic case; and may include the following:

### Pretreatment Records

- Patient's Chief Complaint
- Medical and Dental History
- Clinical Examination
  - ♦ Extraoral Facial Exam
  - ♦ Intraoral Exam
  - ♦ TMJ Evaluation

### Diagnostic Records

- Extra & Intraoral Imaging/Photos
- Dental Casts
- Intraoral and/or panoramic radiographs
- Cephalometric radiographs

#### Post-Treatment Records

- Extra and Intraoral Imaging/Photos
- Dental Casts
- Intraoral and/or panoramic radiographs
- Cephalometric radiographs

17-1 Rev: 09/21/10

Age, skeletal growth pattern, remaining facial growth and severity of malocclusion, as well as the patient's needs and desires, should all be considered when formulating the orthodontic diagnosis and treatment plan. Timing of treatment should be appropriate to the patient's skeletal and dental development. Any anticipated compromises in the objectives of optimal intercuspation, overbite and overjet, contact relationships and periodontal status should be explained to the patient and noted in the records. Active treatment should be followed by delivery and supervision of appropriate retention appliances in order to enhance the stability of the orthodontic correction.

Written records should be detailed to assess and support clinical progress throughout treatment. The lack of adequate records and documentation to support the case may lead the case to be unacceptable. Patient compliance is a critical aspect of successful orthodontics. A determination as to the patient's role in the success or failure of the case should be considered.

Gingival recession, bone loss, decalcification, root resorption and relapse, while undesirable, may all occur in well treated cases and should not be considered in and of themselves as criteria for quality of treatment. What should be considered is how the orthodontist responded to their presence and whether or not good clinical judgment was exercised.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the ratings of satisfactory and unsatisfactory. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

17-2 Rev: 09/21/10

# **ORTHODONTICS**

		QUALITY EVALUATION RATING	GSYSTEM
	Rating		Operational Explanation
S A T I S F A C T O R Y	R ROMEO	Range of Excellence  Code: R  Call: Romeo	Care is of satisfactory quality. Diagnosis, treatment, and "end-result" are satisfactory for the particular individual.
	S SIERRA	Range of Acceptability  Code: S  Call: Sierra	Care is of acceptable quality, but exhibits one or more features which deviate from the ideal.
NOT SATISSFACCTOORY	TANGO	Not acceptable, but can be retreated  Code: T Call: Tango	Diagnosis, treatment plan and technical performance and/or "end-result" are not of acceptable quality. Future damage is likely to occur.
	V VICTOR	Not acceptable, further harm was caused and cannot be corrected with retreatment.  Code: V Call: Victor	Orthodontic diagnosis, treatment plan and technical performance and/or "end-result" are not of acceptable quality. Unsatisfactory requiring additional procedures to correct the treatment rendered.

17-3 Rev: 09/21/10

# **ORTHODONTICS**

	QUALITY EVALUATION CRIT	TERIA A	ND ABBREVIATIONS
Code	Diagnosis and Treatment	Code	End-Results
	Baseline conditions have been recorded by adequate diagnostic records such as medical/dental history, a clinical examination, dental casts oriented in centric relation, intra and extraoral photographs, and appropriate radiographs. The records should be sufficient to identify the pretreatment condition and to enable development of a proper course of treatment. An oral mycological or myofunctional evaluation has been performed, if indicated. A suitable written treatment plan has been prepared. The appliances and treatment are appropriate for the orthodontic problems to be resolved. The appliances fit well, with bands adapted so that cement margins are barely visible. Excess adhesive has been removed from bonded attachments.		The end-result of treatment meets accepted norms for function and exhibit a balanced and stable skeletal, facial, and dental arch form which is optimal for the patient. Axial inclination of the teeth are such that optimal esthetic and functional results have been achieved.
	(Refer to General Guidelines.)		(Refer to General Guidelines.)
SFT	Baseline conditions have been recorded by only limited diagnostic records. In those cases where treatment objectives are less than ideal, the rationale for such is recorded in the treatment plan. The appliances are not as closely <b>fitted</b> as desired, but cement margins on bands are adequate to prevent food impaction.	SFU	Occlusion, arch form, axial inclinations and skeletal balance are <b>functionally</b> and aesthetically acceptable.
TRC TDG TPR TDN TFT TMG	Baseline conditions have not been adequately recorded.  Diagnosis is faulty and the treatment plan is inconsistent with the orthodontic problems.  Prognosis for satisfactory treatment is poor.  Appliance design and construction may not be capable of resolving the stated problems.  Appliances fit poorly.  The cement margins on bands are such that leakage can occur. Extraneous bonding adhesive has resulted in gingival irritation. Oral hygiene is poor, and no effort has been made to correct the situation.	TOC TAR TIC TBC	There is little or no improvement in <b>occlusion</b> , <b>arch</b> form, axial <b>indications</b> or skeletal <b>balance</b> (despite patient <b>compliance</b> ). However, the potential for correction still remains. The oral tissues exhibit <b>pathologic changes</b> which have been caused by appliance design, placement or management.
VDG VDN VDR VDT VMG VHY	The malocclusion was not recognized or accurately diagnosed.  Appliance design and construction was or is not capable of treating the stated problem.  Appliance design may be acceptable, but injudicious use of direction, duration or magnitude of forces has occurred or is occurring. There is generalized, extremely poor oral hygiene, such that continuation of orthodontic treatment poses a greater threat to good oral health than does termination of treatment.	VMAL VDMG	Major functions and/or esthetic elements of the <b>malocclusion</b> persist. Appliance design, placement or management has resulted in rampant and severe <b>damage</b> to the oral environment.

17-4 Rev: 09/21/10

# ORTHODONTICS

Patient:	Dentist:
Date of Examination:	Examiner:
Treatment in Question:	
Radiographs taken at examination? Yes No _	Date & Type radiographs reviewed:
Describe general periodontal health:	
Additional Complaints:	
Remarks to Patient:	Patient told to seek treatment? Yes No
1. Additional2. Immediate	3. Emergency
CLINICAL SUMMARY: Satisfactory/Unsatisfact	tory (circle one)
State reason for above summary:	
Operational Explanation R-Range of excellence S-Satisfactory T-Unsatisfactory, future damage is likely V- Unsatisfactory, damage to patient is no	
Diagnosis (circle one)	Comments/Observations
R S T V	
Treatment Plan	Comments/Observations
(circle one)	Comments/Observations
R S T V	
Examination Findings (clinical or records) (circle one)	Comments/Observations
R S T V	
Patient Cooperation (circle one)	Comments/Observations
R S T V	
Myofunctional Problems	Comments/Observations
Retention Phase (circle one)	Comments/Observations
R S T V	

17-5 Rev: 09/21/10

### PRETREATMENT CONDITION

		Right Side Molar Cuspid	<u>Left Side</u> Molar Cuspic	ı			Dental Conditi	ion			
Class I											
Class II Div I											
Class II Div II											
Class III											
Arch Length	Maxillary Mandibu	<u> </u>			Adequate Adequate		Deficient Deficient		Amount	mm	
Crossbite	Right Si	de Left Si	de		Anterior						
Overbite	Normal	Open F	Bitemm		Closed bitemm						
Overjet	Normal	Edge to	Edge	E	Excessivemm						
Curve of Spee	Normal	Revers	ed	F	lat		Deep				
Dentition	Primary	Mixed		P	Permanent						
Midline		y Midline to Midsag ılar Midline	ital	_/		At R					
Path of Closure	Normal	Right I	Lateral Slide		Left Lateral Slide	Occi	usion/ Anterior Slide				
TMJ	Normal Pain		ight/left on right/left		Restricted opening		Closed Lock				
Lip Posture	Normal	Togeth	er Strained		Apart						
Lip Tonus	Normal	Hypoto	onus		Hypertonus						
Frenum	Normal	Heavy	Upper/Lower								
Tonsils	Normal	Enlarge	ed		Enlarged & Pitted		Problem				
Eruption	Normal	Early			Late						
Profile	Normal	Retrusi	ve		Flat		Protrusive				
Myofunctional	None	Tongue	e Thrust		Lip Wedging		Mentalis				
Habits	None	Thumb	sucking		Mouth breathing		Fingernail				
Hygiene	Excellen	t Good			Fair		Poor				

17-6 Rev: 09/21/10

### **EXAMINATION FINDINGS**

Angle Classificati	ion	<u>Right Side</u> Molar Cu	<u>e</u> <u>Left S</u> uspid Molar			Dental Condition	
Class I							
Class II Div	I						
Class II Div	II						
Class III							
Arch Length	Maxillary	E	Excess		Adequate	Deficient	Amountmm
	Mandibula	ar E	Excess		Adequate	Deficient	Amountmm
Crossbite	Right Side	eL	Left Side		Anterior		
Overbite	Normal		Open Bitem	n 🗌	Closed bitemm		
Overjet	Normal	E	Edge to Edge		Excessivemm		
Curve of Spee	Normal	R	Reversed		Flat	Deep	
Dentition	Primary		Mixed		Permanent		
Midline		ry Midline to ular Midline	Midsagital	/		At Rest/_ Occlusion/_	
Path of Closure	Normal	R	Right Lateral Slid	e	Left Lateral Slide	Anterior Slide	
Lip Posture	Normal	Т	Γogether Strained		Apart		
Lip Tonus	Normal	H	Hypotonus		Hypertonus		
Frenum	Normal	ШН	Heavy Upper/Lov	ver			
Tonsils	Normal	E	Enlarged		Enlarged & Pitted	Problem	
Eruption	Normal	E	Early		Late		
Profile	Normal	R	Retrusive		Flat	Protrusive	
Myofunctional	None	Т	Tongue Thrust		Lip Wedging	Mentalis	
Habits	None	Т	Thumb sucking		Mouth breathing	Fingernail	
Hygiene	Excellent		Good		Fair	Poor	

17-7 Rev: 09/21/10

### **Dental Implants**

### **General Guidelines**

### **Pre-Amble to Implant Guidelines:**

Since implant success involves both surgical treatment and prosthetic treatment, evaluation of a restored implant case requires use of both the implant guidelines and prosthetic guidelines sections of the Quality Evaluation Manual.

### Patient Evaluation and Work-Up:

Patient evaluation procedures are selected to help formulate treatment recommendations. When appropriate, these may include the following:

### 1. Chief Complaint

### 2. Medical History

- a. Current Treatment/Therapy
- b. Major Illnesses or Diseases
- c. Current Relevant Medications
- d. Allergies
- e. Trauma, Radiation Therapy
- f. Motor Skills (post CVA, Parkinsons, Arthritis)
- g. Orthopedic Implants
- h. Special Needs Patients (Maxillofacial Prosthodontic Patients with oral-facial discontinuities from trauma, congenital or surgical procedures; syndromic patients; severely medically compromised such as the immunosupressed and those with history of ONJ as related to bisphosphonate therapy). Patients who will undergo or have experienced radiation therapy.

### 3. Social and Family History

- a. Financial Responsibility
- b. Tobacco and/or Alcohol Use\
- c. Other Drug Use or Dependency

### 4. Dental History

- a. Previous Dental Experiences
- b. Reasons For and Dates of Previous Extractions
- c. Oral Hygiene and Home Care
- d. Periodontal
- e. TMJ
- f. Habits (bruxism, etc.)
- g. Occlusion and Severe Oral/Structural Disparities

18-1 Rev: 09/21/10

### 5. Physical Examination and Assessment

- a. Significant Relevant Disease Co-Factors
- b. Appropriate Laboratory Studies
- c. Medical Clearance if Indicated for Compromised Patients

#### 6. Dental Examination

- a. Charting of Teeth, Present and Missing
- b. Appropriate Diagnostic Aids (may include the following):
  - i. Panoramic and/or PA Radiographs
  - ii. Cephalometric Radiographs
  - iii. Mounted Study Models
  - iv. Linear Tomography
  - v. Sufficient imaging to assure safe placement of the implant to prevent impingement on associated structures. i.e. nerves, sinuses or cortical plate perforation.
  - vi. CT Generated Bone Models
- c. Evaluation of Bone Quality and Availability
- d. Ridge Classification, Relationships and Occlusion
- e. Periodontal Pocket and Mobility Recordings
- f. Soft Tissue Attached Gingiva, Muscle Attachments
- g. Lip Line (smile line)
- h. TMJ, Myofacial
- i. Evaluation of Current Prostheses
- j. Potential for impingement of associated structures ie IA nerve, mental foramen
- 7. Prognosis for remaining dentition
- 8. Psychological Evaluation
  - a. Emotional Stress Factors
  - b. Ability to Understand Treatment Options
  - c. Realistic Expectations of Outcome
  - d. Ability to Tolerate Therapy
- 9. Treatment Plan. It is important to identify complex cases. The dental team must have adequate training and experience with respect to the proposed treatment. If necessary, the patient should be referred to the appropriate specialist(s).
  - a. Emotional Stress Factors.
  - b. Treatment Options. Considerations: Immediate placement, immediate loading; type of implant system proposed and utilization of screw or cemented abutments (fixed verses detatchable); implant abutment selection, including site location(s) and number.
  - c. Pre-Prosthodontic. Preparation Considerations. Soft tissue management, hybrid dentition mixed with implant; soft tissue and hard tissue consideration (develop or augment or removal of excessive tissues).

18-2 Rev: 09/21/10

- d. Surgical Template. (What would be expressed in the "Operation Notation" of the treatment record). The surgical protocol and type of surgical stent, use of flap or flapless approach, one or multiple stage procedures, condition of pre-prosthodontic corrected sites; immediate placement and immediate loading considerations, medications, and time allowance for treatment.
- e. Esthetics. Special esthetic considerations to reflect anticipated outcomes as related to facial expression (including smile) and profile.
- f. Functional Considerations. There should be a concern for improved mastication and preservation of the neuromuscular complex (including nerve encroachment). Special considerations relative to phonetics and speech. Retention of basic airway and tongue function.
- g. Occlusion. The relationship of implants with the mixed dentition and preservation of the remaining periodontal structures; Inter-arch and intra-arch spacing considerations and allowance for the biologic width and papillae preservation. Spacing considerations for the appropriate or necessary biocompatible materials.
- h. Preventive Consideration. The planned treatment will facilitate the patients ability to access implants and restorations for adequate plaque control.
- i. Access to Care. Implies that the patient has the capability and commitment to assume responsibility for the management and obligations of implant therapy (includes financial and personal commitment with multiple treatment plans presented. Also, allows for other access to care venues or referral services.).
- j. Pre-surgical Consultations
  - i. Restorative Dentist.
  - ii. Surgeon (if different from restoring dentist). Consult request copy.
  - iii. Other dentists/dental specialists involved in case completion. Copy of consult request.
  - iv. Other health care providers or services. Copy of consult request.
  - v. Laboratory technician (if indicated). Copy of laboratory prescription.
- 10. Informed Consent with treatment alternatives, risks, prognosis and costs fully explained.
- 11. Documentation of Procedures. This includes documentation of surgical "Operation Note" provided by the surgeon; states the specific implant placed at each site, time required for healing and integration, possible complications, immediate outcome assessment and the patient tolerance to the procedure.
- 12. Outcomes Assessment. A personal post-surgical and post-restorative assessment as determined by the provider requires documentation. A standardized assessment is recommended and one that considers the anticipated short term and long term outcomes for the services provided.

18-3 Rev: 09/21/10

### **Evaluation Criteria - General:**

- 1. Indication for Implants
  - a. Romeo (excellent) Implants are the preferred treatment option for the current application.
  - b. Sierra (acceptable) Implant application acceptable, but other modalities are equally desirable options. Somewhat less than ideal amount of bone quantity or quality.
  - c. Tango (unacceptable) Other treatment modalities clearly preferable to implants, or implants may be detrimental to remaining dentition. Marginal bone quality or quantity.
  - d. Victor (remove) Implants contraindicated, other modalities not considered. Implants definitely endangering the remaining bone and/or dentition. Implants medically contraindicated. Grossly inadequate bone quality or quantity.
- 2. Adequate Healing Time Before Loading unless it meets general guidelines for immediate loading.
- 3. Adequate Maintenance and Follow-Up Protocol.

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound judgment of the peer review examiners.

18-4 Rev: 09/21/10

# ROOT FORM DENTAL IMPLANTS

	QUALITY EVALUATION RATING SYSTEM							
		Rating	Operational Explanation	Code	Location and Placement			
S A T I S	R ROMEO	Range of Excellence  Code: R Call: Romeo	The implant is of satisfactory quality and is expected to support the prosthesis and not damage the surrounding tissues.		Ideal placement, inclination, number and spacing of implants.  (Refer to General Guidelines.)			
F A C T O R Y	S SIERRA	Range of Acceptability Code: S Call: Sierra	The implant is of acceptable quality but exhibits one or more features which deviate from the ideal.	SL	Asymptomatic penetration of floor of nose or sinus or inferior border of mandible.			
N O T S A T I	T TANGO	Repeat or Correct for Prevention Code: T Call: Tango	The implant is not of acceptable quality. Future damage to the bone and/or surrounding tissues is likely to occur.	TL	Unnecessary tipping or inclination compromising prosthetic stability, esthetics or design. Too few implants for occlusal load requirements.			
S F A C T O R Y	V VICTOR	Repeat Statim Code: V Call: Victor	The implant is not of acceptable quality. Damage to the bone and/or surrounding tissues is now occurring.	L	Severe tipping or malposition requiring implant burial or removal (prosthetically useless). Violation of mandibular canal. Symptomatic violation of sinus, nose or inferior border of mandible. Too close together to maintain health of surrounding bone and soft tissues.			

18-5 Rev: 09/21/10

# ROOT FORM DENTAL IMPLANTS

QUALITY EVALUATION CRITERIA AND ABBREVIATIONS							
Code	Mobility	Code	Peri-Implant	Code	Radiographic	Code	e Subjective Symptoms
RM	No mobility of implant body.	RP	Healthy sulcus; ample keratinized gingiva.	RR	Implant body fully approximated by healthy bone.	RS	Lack of symptoms, even with heavy function.
	(Refer to General Guidelines.)		(Refer to General Guidelines.)		(Refer to General Guidelines		(Refer to General Guidelines.)
SM	Perceived slight mobility attributable to replaceable implant part or restorative components.	SP	Healthy sulcus; insufficient keratinized gingiva, but "fixed mucosa" is stable. Mild treatable inflammation.	SR	Implant body fully approximated by healthy bone, but slightly more crestal bone loss. No widening implant space present.	SS	Only slight discomfort under heavy load or lateral excursions.
TM	Slight physiologic mobility resembling natural dentition, which may be reversible if completely unloaded and treated.	TP	Pathologic pockets; mucosa pulls away from implant with function – may be treatable with tissue graft, pocket elimination procedures, or regenerative procedures.	TR	Progressive crestal cratering noted; slight widening of peri-implant space present.	TS	Pain with normal function; slight dysesthesia etiologic to implant impingement on nerve.
VM	Progressive mobility indicating irreversible loss of integration; removal indicated.	VP	Untreatable pockets, dehiscence, fistula, or abscess present; removal indicated.	VR	Untreatable vertical bone loss or symptomatic apical radiolucency present; progressive widening of peri-implant space.	VS	Steady pain; marked pain with function; bad taste or drainage; marked dysesthesia attributable to nerve impingement by implant.

18-6 Rev: 09/21/10

# **Immediate Loading of Implants and Immediate Placement of Implants**

### **General Guidelines**

The bone quantity should be sufficient and bone quality should ensure the primary stability of the implant. Stabilization must be established to avoid micro-movement of the fixtures at the bone-implant interface. There should be a wide anterior-posterior distribution to resist micro-movement and a rigid understructure of provisional restorations. Passive fit of the provisional restoration and no gaps at the junction between the temporary cylinders and the abutments is important.

### Further considerations:

- Pre-torqued abutments
- Parafunction
- Implant Positions
- Implant Number
- Type I bone or Type II bone. Especially when considering immediate placement.
- Implant Size, for available bone and loading expectations
- Bone graft material can be used in the immediate placement situation
- Permanent or provisional restoration
- Appropriateness of loading
- Degree of loading
- Vertical forces only, for immediate loading, no excursive movements

The quality evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

18-7 Rev: 09/21/10

# IMPLANTS AND IMPLANT PROSTHODONTICS

Patient:		Dentist:	
Date of Examination:			
Removable R	n: /Arch Position of Implants Restoration (Attach Complation (Complete Page 3 Re	lete Denture Prosthodon	itics Form)
Patient's Contribution	n:		
	Patient told to seek treatment		
1. Additional	2. Imme	ediate	3. Emergency
General Health/Medi	cal Risks:		
CLINICAL SUMMA		nsatisfactory (circle one	
State reason for abov	e summary:		
			Comments/Observations
	age is likely to occur		
erational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama	age is likely to occur patient is now occurring		
perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to	age is likely to occur patient is now occurring	Yes No	Comments/Observations
Perational Explanation  - Range of excellence - Satisfactory - Unsatisfactory, future dama - Unsatisfactory, damage to	age is likely to occur patient is now occurring     by Doctor under Review:		Comments/Observations
Perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to  Ce-Treatment Evaluation  rgical Placement of Implant	age is likely to occur patient is now occurring     by Doctor under Review:  tor under Review:	Yes No Yes No	Comments/Observations
Perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to  CETreatment Evaluation  regical Placement of Implant storation of Implant by Doc	age is likely to occur patient is now occurring     by Doctor under Review:  tor under Review:  atment:	Yes No	Comments/Observations
Perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to  Pe-Treatment Evaluation  regical Placement of Implant  storation of Implant by Doc  Formed Consent Prior to Treatment Evaluation  agnostic Models  Yes	age is likely to occur patient is now occurring   by Doctor under Review: tor under Review: atment:  No No	Yes No Yes No	Comments/Observations
Perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to  Pe-Treatment Evaluation  regical Placement of Implant storation of Implant by Doc  Formed Consent Prior to Treatment Consent Prior to Treatment Surgical Stent  Surgical Stent  Yes	age is likely to occur patient is now occurring   by Doctor under Review:  tor under Review:  atment:  No  No	Yes No Yes No Yes No	Comments/Observations
Perational Explanation  Range of excellence Satisfactory Unsatisfactory, future dama Unsatisfactory, damage to  Pe-Treatment Evaluation  regical Placement of Implant  storation of Implant by Doc  Formed Consent Prior to Treatment Evaluation  agnostic Models  Yes	age is likely to occur patient is now occurring   by Doctor under Review:  tor under Review:  atment:  No  No	Yes No Yes No	Comments/Observations

18-8 Rev: 09/21/10

Radiographs: Pre - Op	Date and Type
Radiographic Findings:	
Radiographs: Post - Op	Date and Type
Radiographic Findings:	
Radiographs Taken at time of Examination: YesNo	Date and Type
Radiographic Findings:	
Radiographic Findings:  Surgical Evaluation	
	Type of Implant Placed :
Surgical Evaluation	
Surgical Evaluation  Date of Implant Placement:	Type of Implant Placed :   Esthetic Zone: Yes No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:	Type of Implant Placed :   Esthetic Zone: Yes No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable	Type of Implant Placed : No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable  Surgical Protocol: Acceptable / Not Acceptable	Type of Implant Placed : No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable  Surgical Protocol: Acceptable / Not Acceptable  Fixture Placement (Position/Alignment): Acceptable / Not Acceptabl  Appropriateness of Implant Selected: Acceptable / Not Acceptable _  Integration of Implant to Bone: Explanation)	Type of Implant Placed :  Esthetic Zone: Yes No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable  Surgical Protocol: Acceptable / Not Acceptable  Fixture Placement (Position/Alignment): Acceptable / Not Acceptable  Appropriateness of Implant Selected: Acceptable / Not Acceptable	Type of Implant Placed :  Esthetic Zone: Yes No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable  Surgical Protocol: Acceptable / Not Acceptable  Fixture Placement (Position/Alignment): Acceptable / Not Acceptabl  Appropriateness of Implant Selected: Acceptable / Not Acceptable _  Integration of Implant to Bone: Explanation)	Type of Implant Placed :    Esthetic Zone: Yes No
Surgical Evaluation  Date of Implant Placement:  Tooth/Arch Position of Implant Placed:  Treatment Plan: Acceptable / Not Acceptable  Surgical Protocol: Acceptable / Not Acceptable  Fixture Placement (Position/Alignment): Acceptable / Not Acceptable Appropriateness of Implant Selected: Acceptable / Not Acceptable  Integration of Implant to Bone: Explanation)  Bone Augmentation Procedures:	Type of Implant Placed :    Esthetic Zone: Yes No

18-9 Rev: 09/21/10

Restorative Evaluation (Repeat Criteria	for Each Unit of Restoration Evaluated)				
Date of Restoration Placement	Type of Restoration				
Note: For Removable Prosthesis – Attach Form #78 Complete Denture Prosthodontics					
Restoration in Esthetic Zone: Yes No	Observations:				
Peri-Implant Health / Tissue Contours					
Implant/Abutment Selection: Acceptable/N	Tot Acceptable Comments/Observations				
Prosthetic Design: Acceptable/N	Tot Acceptable				
(circle one)					
(chicle one)					
Shade R S T	V				
Surface Texture R S T	V				
Contours R S T	V				
Occlusion R S T Contacts R S T	V V				
Imp/Restn Interface R S T	V				

18-10 Rev: 09/21/10

# Immediate Loading of Implants and immediate placement of implants

#### General Guidelines

The bone quantity should be sufficient and bone quality should ensure the primary stability of the implant. Stabilization must be established to avoid micro-movement of the fixtures at the bone-implant interface. There should be a wide anterior-posterior distribution to resist micro-movement and a rigid understructure of provisional restorations. Passive fit of the provisional restoration and no gaps at the junction between the temporary cylinders and the abutments is important.

### Further considerations:

- Pre-torqued abutments.
- Parafunction.
- Implant positions.
- Implant number.
- Type I bone or Type II bone. Especially when considering immediate placement.
- Implant Size for available bone and loading expectations.
- Bone graft material can be used in the immediate placement situation.
- Permanent or provisional restoration.
- Appropriateness of loading.
- Degree of loading.
- Vertical forces only, for immediate loading, no excursive movements.

The quality-evaluation criteria should be considered merely as <u>aids</u> for the discrimination between the four ratings for each characteristic. The determination of the rating of any given dental service is dependent upon the sound <u>judgment</u> of the peer review examiners.

18-6 Rev. 8/2004

#### **General Guidelines**

Unlike most of the treatment modalities in dentistry, the treatment of patients with temporomandibular joint dysfunction syndrome and/or myofacial pain disorders calls for a multifaceted approach by the treating dentist. For this reason, the code words Romeo, Sierra, Tango, or Victor (which are in common usage in the California Peer Review System) cannot be applied. In their stead, the following guidelines are presented so that review committees will have a basis on which to judge whether or not the patient has received or is receiving care which the profession considers adequate.

Because of the nature of the problem(s) confronted by patients with TMJ-MPD symptoms, a complete evaluation, differential diagnosis and management plan usually cannot be made in the initial stages of treatment. It is often necessary while gaining diagnostic information for the treating dentist to attempt to eliminate, or alleviate, the acute symptoms. Many of the currently practiced palliative treatments would be acceptable at this stage. An example would be a bite plane.

As the palliative treatment is proceeding, the clinician should be finalizing I. Evaluation; II. Diagnosis; and III. Treatment Modalities. The Council on Dental Care wished to suggest that the following information not be considered as anything other than guidelines which may be helpful in determining the appropriateness of care.

#### I. Evaluation

- A. Histories
- B. Physical Examination
  - 1. Craniomandibular
  - 2 Intraoral Examination
  - 3. Cranial Nerve and Neurologic Examination
  - 4. Mental Status
  - 5. Head and Neck Inspection
  - 6. Cervical Spine -- It is strongly recommended that clinicians not completely and extensively trained in complete physical examination refrain from physical examination and obtain a consultation with an appropriate medical specialty.
- C. Imaging -- A particular imaging may be performed when the results of the imaging may aid in determining the treatment strategy.
- D. Diagnostic Studies

19-1 Rev: 09/21/10

- E. Behavioral and Psychosocial Assessment
- **II. Diagnosis** -- A diagnosis of TMJ pain dysfunction syndrome is in itself unacceptable and the provider should specify the diseased condition prior to starting a definitive treatment plan. The following would serve as a guideline for final diagnosis.
  - A. Disorders of Intracranial or Extracranial Structures
  - B. Craniomandibular Disorders
    - 1. Masticatory Muscle Disorders
    - 2. Temporomandibular Joint Disorders
  - C. Craniofacial Pain Disorders of Physical Origin
  - D. Craniofacial Pain Disorders of Psychological Origin
- III. Treatment Modalities -- Treatment modalities may be divided into Phase I and Phase II treatment as suggested by the AAOMS. Phase I treatment includes diagnosis and management of symptoms. Phase II treatment can occur once symptoms have subsided and the patient has been maintained through appliances in a stable pain-free condition, or if Phase I treatment is ineffective.
  - A. Phase I
    - 1. Behavioral and Psychological Therapy
    - 2. Orthopedic Stabilization
    - 3. Pharmacotherapy
    - 4. Physical Medicine
  - B. Phase II
    - 1. Secondary Dental Stabilization
    - 2. Surgery
      - a. Intra-Capsular
        - (1) Open
        - (2) Arthroscopic
      - b. Extra Capsular

Each of the following criteria adapted, from the AAOMS position paper of 1984, should be fulfilled before proceeding with TMJ surgery:

19-2 Rev: 09/21/10

- 1. Documented TMJ internal derangement or other structural joint disorder with appropriate imaging;
- 2. Evidence that suggest symptoms and objective findings are a result of disk derangement or other structural disorder;
- 3. Pain and/or dysfunction of such magnitude as to constitute a disability to the patient;
- 4. Prior unsuccessful treatment with a non-surgical approach that includes a stabilization splint, physical therapy and behavior therapy;
- 5. Prior management of bruxism, oral para-functional habits, or other medical or dental conditions (MPS, etc.) or contributing factors that will affect outcome of surgery; and
- 6. Patient consent.

#### Addendum

Statement of the ADA Council on Dental Materials, Instruments and Equipment

# Status Of Electronic Instruments Used As Aids In The Diagnosis and Treatment of TMD\*

The council has received and reviewed voluminous materials from industry, comments from more than a dozen consultants and letters from interested dentist members regarding electronic instruments used as aids in the diagnosis and treatment of TMD. The council has also received and reviewed the paper that it requested of Dr. Mohl, et.al and commends him and his colleagues for their valuable scientific contribution. In lieu of adopting Dr. Mohl's paper as an official status report, the council has instead decided to issue this statement.

Some practitioners report success in the use of these instruments as aids in diagnosis and treatment of TMD. It also appears that a number of these instruments accurately measure what they are intended to measure.

However, the council believes that present scientific knowledge reflects that considerable disagreement remains regarding the value of these instruments for diagnosis and treatment of TMD. For this reason, the council urges the scientific community and industry to conduct well-designed scientific clinical studies, using adequate control groups and sample sizes, to provide evidence that will resolve the disagreement. Only then will the profession be in a position to assess fully the need for and value of these instruments as aids in the diagnosis and treatment of TMD.

This statement by the council is not intended to be a standard or substitute for the professional judgment of the dental professional. It also is not intended to be utilized for or against insurance reimbursement for any particular diagnostic or treatment modalities regarding TMD.

\* Adopted by the Council on Dental Materials, Instruments and Equipment May 1989.

19-3 Rev: 09/21/10

### **Bibliography**

- 1. California Dental Association Peer Review Manual -- August 2004; Council on Peer Review.
- 2. Minnesota Dental Association Guidelines for TMJ -- November, 1988.
- 3. Journal of Prosthetic Dentistry 44:434, 1980 and taken from CDA Journal -- March, 1985.
- 4. AAOMS Position Paper 1984.
- 5. ADA's President's Conference on the Examination, Diagnosis and Management of Temporomandibular Disorders -- June, 1982.
- 6. Summary of the workshop of Temporomandibular Disorders sponsored by the American Dental Association -- November, 1988 *Journal of Periodontology*, April, 1989.
- 7. Craniomandibular Disorders: Guidelines for Evaluation, Diagnosis and Management -- American Academy of Craniomandibular Disorders; Edited by Charles McNeil, D.D.S., 1990.

19-4 Rev: 09/21/10