



# Clinical UM Guideline

**Subject:** Scaling and Root Planing

**Guideline #:** 04-301

**Status:** Reviewed

**Current Effective Date:** 07/01/2016

**Last Review Date:** 07/10/2017

## Description

This document addresses **Scaling and Root Planing** of teeth either by quadrant or partial quadrant.

**Note:** Please refer to the following documents for additional information concerning related topics:

- Periodontal Maintenance #04-901

## Clinical Indications

### Medically Necessary:

**Deep scaling and root planing is a nonsurgical treatment** considered **medically or dentally necessary** for the treatment of mild to severe periodontal disease. Periodontal scaling and root planing is:

1. a demanding and time-consuming procedure involving instrumentation of the tooth crown and root structures.
2. to remove plaque and biofilm, adherent calculus deposits, and diseased cementum (root structure) that may be permeated with calculus, microorganisms and microbial toxins.
3. involves hand instrumentation

NOTE: Periodontal scaling and root planing is considered therapeutic, rather than prophylactic, and constitutes definitive treatment for periodontal patients. The therapeutic objective of scaling and root planing is to reduce or eliminate causative factors responsible for initiating a host inflammatory responses. Bacterial toxins and the body's natural response to infection begin the process of breaking down the bone and connective tissue that holds the teeth in position. If left untreated, the supporting tissues (bone, gums, and tissue supporting the teeth) will be irreversibly damaged making the teeth mobile. The teeth may eventually become loose requiring removal.

Medically/Dentally Necessary or Medical/Dental Necessity means Medical/Dental Services that are:

(1) Consistent with the Member's diagnosis or condition;

(2) Is rendered:

(A) In response to a life-threatening condition or pain; or

(C) To achieve a level of function to the dentition consistent with prevailing community standards

for the diagnosis or condition.

**Not Medically Necessary:**

Use of Lasers: The use of lasers for the non-surgical and surgical treatment of periodontal disease has gained popularity over the last several years. However, the efficacy (effectiveness) of lasers when used in conjunction with hand scaling and root planing has been called into question.

A review of the evidence based literature:

1. does not support the use of lasers as more efficacious than traditional hand scaling or use of a scalpel.
2. indicates when the laser is used for osseous surgery therapy, studies have indicated a delayed healing period when compared to traditional surgery using a scalpel only.

Based on review of the literature, there appears to be a great need to develop an evidence-based approach to the use of lasers for the treatment of chronic periodontitis. The current evidence is insufficient to suggest that any specific wavelength used is superior to traditional modalities of therapy.

There have been three **purported** benefits to the use of lasers in the non-surgical and surgical treatment of periodontal disease that includes:

1. pocket debridement
2. reduction of gingival bacterial levels
3. superiority of laser use for deep scaling and root planing and osseous surgery.

Note: The Nd: YAG or Er: YAG wavelengths for the treatment of chronic periodontitis may be equivalent, but are not superior, to hand scaling and root planing with respect to pocket depth reduction. The evidence based literature does not support this technique as producing better results than original techniques.

**NOTE:**

**A group may define covered dental services under either their dental or medical plan, as well as to define those services that may be subject to dollar caps or other limits. The plan documents outline covered benefits, exclusions and limitations. The health plan advises dentists and enrollees to consult the plan documents to determine if there are exclusions or other benefit limitations applicable to the service request. The conclusion that a particular service is medically or dentally necessary does not constitute an indication or warranty that the service requested is a covered benefit payable by the health plan. Some plans exclude coverage for services that the health plan considers either medically or dentally necessary. When there is a discrepancy between the health plan's clinical policy and the group's plan documents, the health plan will defer to the group's plan documents as to whether the dental service is a covered benefit. In addition, if state or federal regulations mandate coverage then the health plan will adhere to the applicable regulatory requirement.**

<b>Criteria</b>
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1. Current, dated periodontal charting and dated, full mouth periapical radiographic images or a panoramic radiographic image.

2. Teeth to be treated must demonstrate at least 4 millimeter probing pocket depths, bleeding on probing, with demonstrable radiographic evidence of bone loss (either vertical or horizontal) and loss of lamina dura.
3. Periodontal scaling and root planing requires administration of local anesthesia by intramucosal injection.
4. Topical anesthetics and other anesthetic preparations placed subgingivally do not qualify as local anesthesia for scaling and root planing procedures.
5. Benefits will be limited to two quadrants per date of service. Exceptions will be allowed on a case by case basis.
6. The estimated time of treatment a quadrant of scaling root planing will range from 30 – 60 minutes dependent on the periodontal diagnosis/classification, the number of teeth in the quadrant, the type and quantity of plaque and calculus, and the severity of condition. A diagnosis below chronic periodontitis will not qualify for root planing. Consequently gingival diseases, plaque induced or non-plaque induced would not qualify for payment. The following diagnoses would qualify for payment; chronic periodontitis, localized and generalized, aggressive periodontitis, localized and generalized, periodontitis as a manifestation of systemic disease, and necrotizing periodontal diseases.
7. Additional Documentation May Requested:
  - Documentation of the duration of treatment times for periodontal scaling and root planing may be required for individual case review.
  - Other than 4 millimeter pocket depths, parameters for periodontal therapy with scaling and root planing include clinically evident inflammation and/or bleeding.
  - Post-initial therapy evaluations and treatment planning recommendations following completion of scaling and root planing are considered integral components of this procedure.

## Coding

*The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.*

### CDT

*Including, but not limited to, the following:*

D4341	Four or more teeth per quadrant
D4342	Less than three teeth per quadrant
D4999	Unspecified periodontal procedure, by report

### CPT

40804	Removal of embedded foreign body, vestibule of mouth, simple
40805	Complicated
41899	Unlisted procedure, dentoalveolar structures

### ICD-10 Diagnosis

K03.6	Deposits [accretions] on teeth
K05.1	Chronic Gingivitis
K05.30	Chronic periodontitis, unspecified

Z72.0  
Z91

Tobacco use  
Personal Risk Factors, not elsewhere classified

## Discussion/General Information

The beneficial effects of scaling and root planing include improvement of periodontal disease by removing inflammation creating a decrease in bleeding and loss of periodontal attachment. When effective, this non-surgical technique shifts the gingival (gum) bacterial populations. A consequence of this procedure involves some soft tissue removal. However, studies show no additional beneficial effect of soft tissue removal with gingival curettage when compared to scaling and root planing alone. Factors which may limit the effectiveness of scaling and root planing include bone loss into the furcation areas (area between the roots) of molar teeth, anatomic variations in root architecture and refractory areas of deep pocket depths. Therefore radiographic image review must demonstrate evidence of bone loss (either in a horizontal or vertical direction) indicating bone architectural changes.

The positive clinical response of patients, in conjunction with regularly scheduled supportive therapy visits, often precludes the need for more invasive procedures such as with surgical intervention. Long-term studies show that periodontal scaling and root planing, when combined with a program of regular, continued maintenance therapy can stabilize the periodontal disease process over long periods of time.

Following scaling and root planing, the healing process begins immediately where clinical improvements begin to maximize at approximately three months post treatment. Consequently, evaluations for the necessity of subsequent surgical procedures must allow adequate time for an appropriate healing response.

## Definitions

**Biofilm:** Any group of bacteria that stick to each other and often adhere to a surface, such as a tooth. These "sticky" cells are frequently embedded within a self-produced matrix of cells.

**Calculus:** Also known as tartar on the teeth is a form of hardened dental plaque caused by the collection of minerals from saliva and gingival crevicular fluid (GCF). The process of precipitation kills the bacterial cells within dental plaque, but the rough and hardened surface that is formed provides an ideal surface for further plaque formation. This leads to calculus buildup, which compromises the health of the gingiva (gums). Calculus can form both along the gumline, where it is referred to as supragingival ("above the gum"), and within the narrow space that exists between the teeth and the gingiva, where it is referred to as subgingival ("below the gum"). Calculus formation is associated with a number of signs and symptoms including bad breath, receding gums and inflamed gingiva. Brushing and flossing can remove plaque from which calculus forms; however, once formed, it is too hard and firmly attached to be removed with a toothbrush requiring removal at the dentist's office.

**Dental Plaque:** Is a biofilm or mass of bacteria that grows on surfaces within the mouth. It is a sticky colorless deposit at first, but when it forms tartar it is brown or pale yellow and is commonly found between the teeth, on the front of teeth, behind the teeth, on chewing surface, along the gumline, and below the gumline. Dental plaque is also known as microbial plaque, oral biofilm, dental biofilm, dental plaque biofilm or bacterial plaque biofilm. While plaque is commonly associated with oral diseases such as caries (cavities) and periodontal disease (gum diseases), its formation is a normal process that cannot be prevented.

**Gingiva:** The clinical term for gums. The gums are found in the oral cavity or mouth. They consist of mucosal (soft, pink) tissue that covers the alveolar processes (bone) of the maxilla (upper jaw) and mandible (lower jaw) and finish at the neck of each tooth.

**Periodontal Disease:** Can affect one or more of the tissue/structures associated with teeth {e.g. bone, the ligament that attaches the tooth to bone and gingiva (gums)}. While there are many different periodontal diseases that can affect these tooth-supporting tissues/structures, by far the most common ones are plaque-induced inflammatory conditions, such as gingivitis and periodontitis.

**Periodontium:** Refers to the specialized tissues that surround and support the teeth and maintain the teeth in the upper and lower jaw bones.

**Saliva:** A watery substance located in the mouth, secreted by salivary glands. Human saliva is 99.5% water with the remainder consisting of several things such as minerals, mucus, protein, enzymes, and bacterial compounds.

**References**

**Peer Reviewed Publications:**

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2. Mosques T, Listgarten MA and Phillips RW. Effect of scaling and root Planing on the composition of human subgingival microbial flora. J Perio Res 1980; 15:144-151.
3. Nordland P, Garrett S, et al. The effect of plaque control and root debridement in molar teeth. J Clin Perio 1987; 14:231-236.
4. Morrison EC, Ramfjord SP and Hill RW. Short-term effects of initial non-surgical periodontal treatment (hygienic phase). J Clin Perio 1980; 7:199- 211.
5. Loos B, Kiger R and Egelberg J. An evaluation of basic periodontal therapy using sonic and ultrasonic scalers. J Clin Perio 1987; 14:29-33.
6. Kaldahl WB, Kalkwarf KL, et al. Long-term evaluation of periodontal therapy: I. Response to four therapeutic modalities. J Perio 1996; 67:93- 102.
7. American Dental Association. *Current Dental Terminology. CDT 2015: 36-37* (©ADA 2015).
8. Badersten A, Nilveus R and Egelberg J. Effect of non-surgical periodontal therapy. I. Moderately advanced periodontitis. J Clin Perio1981; 8:57-72.
9. Ainslie P and Caffesse R. A biometric evaluation of gingival curettage (II). Quintessence Int'l 1981; 6:609-614.
10. Garrett JS. Effects of non-surgical periodontal therapy on periodontitis in Humans. A review. J Clin Perio 1983; 10:515-523.
11. Escheverra JJ and Caffesse RG. Effects of gingival curettage when performed one month after maintenance instrumentation. A biometric evaluation. J Clin Perio 1983; 10:277-286.
12. Hughes TP and Caffesse RG. Gingival changes following scaling and root planing and oral hygiene—a biometric evaluation. J Perio 1978; 49:245-252.
13. Magnusson I, Lindhe J, et al. Recolonization of subgingival microbiota following scaling in deep pockets. J Clin Perio 1984; 11:193- 207.

**Government Agency, Medical Society, and Other Authoritative Publications:**

1. American Academy of Periodontology. Treatment of gingivitis and periodontitis (position paper). J Perio; 1997; 12:1246-1253.

**History**

Status	Date	Action
Reviewed	06/23/2016	
	07/10/2017	modified criteria

Federal and State law, as well as contract language, and Dental Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Clinical Policy Committee are available for general adoption by plans or lines of business for consistent review of the medical or dental necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to implement a particular Clinical UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan's or line of business's members may

instead use the clinical guideline for provider education and/or to review the medical or dental necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical or dental necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.

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