Dental Policy

Subject: **Clinical Crown Lengthening**
Guideline #: **04-206** **Publish Date:** **03/15/2018**
Status: **Revised** **Last Review Date:** **02/06/2018**

Description

This document addresses the procedure of clinical crown lengthening.

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

- Crowns Inlay and Onlays- #02-701
- Abutment Crowns and Fixed Partial Dentures 02-701
- Clinical Policy-01 Teeth with Poor or Guarded Prognosis

Clinical Indications

Clinically, crown lengthening is necessary and appropriate in a healthy periodontal environment when there is inadequate tooth structure exposed to the oral cavity to retain a dental restoration.

As it applies to appropriateness of care, dental services are:

- provided by a Dentist, exercising prudent clinical judgment
- provided to a patient for the purpose of evaluating, diagnosing and/or treating a dental injury or disease or its symptoms
- in accordance with the generally accepted standards of dental practice which means:
    - standards that are based on credible scientific evidence published in peer-reviewed, dental literature generally recognized by the practicing dental community
    - specialty society recommendations/criteria
    - any other relevant factors
- clinically appropriate, in terms of type, frequency and extent
- considered effective for the patient's dental injury or disease
- not primarily performed for the convenience of the patient or Dentist
- not more costly than an alternative service.
- dependent on group contract provisions, cosmetic services may not qualify for benefit coverage even though the services may be clinically appropriate.

This procedure is inappropriate in a periodontally unhealthy environment. The procedure is also not appropriate when the resulting crown to root ratio is unfavorable, 1:1 considered minimally adequate.

Note: Whether a service is covered by the plan, when any service is performed in conjunction with or in preparation for a non-covered or denied service, all related services are also either not covered or denied.

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.

General Criteria

1. Clinical crown lengthening is appropriate where the margin of a proposed restoration would violate the periodontal attachment apparatus. A diagnostic radiograph must be submitted which documents less than three millimeters of sound natural tooth structure between the restorative margin and the alveolar crest.
2. When indications are not evident by radiographic examination, an additional patient records will be requested documenting the need for treatment.
3. Clinical crown lengthening may only be performed in a periodontally healthy environment.
4. Clinical crown lengthening will not be considered when performed in conjunction with any procedure that addresses a periodontal treatment for unhealthy periodontal tissues within the same quadrant on the same date of service. This includes any periodontal procedure, but not limited to, gingivectomy, frenectomy, distal wedge reduction, grafting, and scaling and root planing, which will be considered as an integral component of a clinical crown lengthening procedure.
5. Prior to the final restoration of a tooth, a minimum of 4 - 6 weeks must be allowed for healing of bone and soft tissue following clinical crown lengthening.
6. This procedure requires removal of hard (osseous) tissue as well as soft (gingival) tissue and requires an alteration of the crown-root ratio of the tooth. If the resulting bone removal results in an inadequate crown to tooth ratio, there will be no benefit as the long term prognosis of the remaining tooth will be compromised. The minimum crown-to-root ratio necessary is 1:1; any less support provided by the roots drastically reduces the prognosis of the tooth and its restoration. Every millimeter of lost bone contributes to a millimeter of less support and a millimeter of more structure to support.
7. When performed for cosmetic (esthetic) purposes or to correct congenital or developmental defects, this procedure is considered elective treatment.
8. Clinical crown lengthening will not be considered for treatment of teeth with structural loss due to wear, erosion, attrition, abrasion and abfraction.
9. Clinical crown lengthening will be considered for treatment of natural teeth only.
10. Clinical crown lengthening will be considered only when subgingival caries or fracture requires removal of soft and hard tissue to enable restoration of a tooth.
11. When performed in conjunction with osseous surgery for periodontal disease, the crown lengthening procedure is inclusive with osseous surgery.
12. If distal or proximal wedge procedure (D4274) performed in conjunction with D4249 on same date of service, then D4274 is considered inclusive.
13. When performed for cosmetic reasons crown lengthening will not be allowed.
14. 'Troughing' of the soft tissue as part of the crown preparation, or to visualize the margins for impressions, does not meet the CDT descriptor for D4249.
15. If crown lengthening is performed on the same date of service as the crown, D4249 is considered inclusive with the crown.
16. Periodontal pocket charting may be required.

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:

D4249	Clinical crown lengthening – hard tissue

CPT

41899	Unlisted dentoalveolar procedure

ICD-10 Diagnosis

K01.0	Embedded teeth
K02.62	Dental caries on smooth surface penetrating into dentin
K02.63	Dental caries on smooth surface penetrating into pulp
K02.7	Dental root caries
K02.9	Dental caries, unspecified

Discussion/General Information

Clinical crown lengthening is a surgical procedure used to expose sound tooth structure with little or no tooth structure remaining exposed to the oral cavity. The procedure is performed to facilitate the placement of a new restoration in an area where a fracture, a present failing restoration, or decay extends below the gingival margin and approaches the periodontal attachment apparatus. This procedure can ensure an adequate tooth to restoration junction and prevent a compromise of the biologic periodontal attachment to the tooth. Crown lengthening procedures require full thickness gingival flap reflection and involve appropriate removal of both soft (gingival) and hard (osseous) tissues that alters the crown to root ratio. Clinical crown lengthening is performed in a healthy periodontal environment.

Clinically, the anatomical definitions of a tooth define what is important in terms of support. What matters is the amount of root structure remaining within the bone after crown lengthening.

The cementoenamel junction exists much closer to the occlusal surface of a tooth than to the tip of the root or roots. Therefore, root length is considerably longer than crown length, which allows for proper support of the teeth during normal function. A tooth requires a healthy, sturdy root system encased in bone to protect it from being knocked out of the mouth. Crown to root ratios that are poorer than 1:1 creates a less than ideal situation that compromises the longevity of the remaining tooth from occlusal forces.

Definitions

Biological Width - the natural distance between the base of the gingival sulcus and the height of the alveolar bone.

Crown – the part of a tooth that is covered by enamel and projects beyond the gum line

Cementum - the bonelike tissue that forms the outer surface of the tooth root

Cementoenamel Junction (CEJ) – abbreviated as the CEJ, it is a slightly visible anatomical border identified on a tooth that is the location where the enamel, which covers the crown of a tooth, and the cementum, which covers the root of a tooth, meet.

Dentin - hard, dense, bone -like tissue forming the bulk of the interior part of a tooth located beneath the enamel and cementum

Enamel - Tooth enamel is one of the four major tissues that make up the tooth. It makes up the visible part of the tooth, covering the crown. The other major tissues are dentin, cementum, and dental pulp.

Periodontium - specialized tissues that surround and support the teeth

Root – the part of a tooth below its neck that is covered by cementum rather than enamel and attached by the periodontal ligament to the bone.

References

Peer Reviewed Publications:

1. American Dental Association: 2016 CDT (Current Dental Terminology) Dental Procedure Codes: @2015 American Dental Association; page 37.

Government Agency, Medical Society, and Other Authoritative Publications:

1. Radiographic assessment of clinical root-crown ratios of permanent teeth in a healthy Korean population: Jour of Advanced Prosthodontics 2014 Jun; 6(3): 171–176. Hee-Jung Yun, Jin-Sun Jeong, Nan-Sim Pang, II-Keun Kwon, Bock-Young Jung.
2. The prosthodontic concept of crown-to-root ratio: a review of the literature: J Prosthetic Dent. 2005 Jun; 93(6):559-62. Grossman Y., Sadan A.
3. Surgical Crown Lengthening: Evaluation of the Biological Width; Sharon K. Lanning, Thomas C. Waldrop, John C. Gunsolley, and J. Gary Maynard; Jour of Perio; Vol 74, No. 4.

History

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Revision History	Version	Date	Nature of Change	SME
	initial	8/10/17		
	Revision	2/6/18	Related Dental Policies, Appropriateness and Medical necessity	M Kahn

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.