UNICARE®

Dental Clinical Policy

Subject: **Endodontic Therapy**
Guideline #: **03-001** **Publish Date:** 01/01/2024
Status: **Revised** **Last Review Date:** 9/13/2023

Description

This document addresses the procedure of endodontic or root canal therapy of teeth.

The plan performs review of endodontic therapy due to contractual requirements that necessitate benefits for dental services meet specific contract requirements. For example, plan contract(s) may require the provision of benefits for services that meet generally accepted standards of dental care at the lowest cost that properly addresses the patient's condition. The conclusion that a particular service is medically or dentally necessary and/or appropriate does not constitute an indication and/or warranty that the service requested is a covered benefit payable by the dental plan.

Clinical Indications

Root canal or endodontic therapy is appropriate when the tooth pulp tissue becomes inflamed or infected as a result of: deep decay, repeated dental procedures, faulty crowns, or a significant crack, fracture or chip in the tooth. In addition, trauma to a tooth may cause pulp damage even if the tooth has no visible chips or cracks. Other indications for endodontic therapy are failure of initial endodontic therapy and internal and external resorption.

Dental review as it applies to accepted standards of care means dental services that a Dentist, exercising prudent clinical judgment, provides to a patient for the purpose of evaluating, diagnosing or treating a dental injury or disease or its symptoms, and that are: in accordance with the generally accepted standards of dental practice; in terms of type, frequency and extent and is considered effective for the patient's dental injury or disease; and is not primarily performed for the convenience of the patient or Dentist, is not cosmetic and is not more costly than an alternative service.

For dental purposes, "generally accepted standards of dental practice" 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
- the views of recognized dentists practicing in the relevant clinical area
- any other relevant factors from credible sources

Root canal or endodontic therapy is not appropriate in the absence of pulpal disease, in cases of extensive caries involving the furcation, extensive alveolar bone loss due to periodontal disease, furcation defect/involvement with extensive bone loss/, and internal and external resorption with questionable or unfavorable prognosis.

Criteria

Requirements/Indications for Endodontic Therapy:

1. Documentation of pulpal disease may include, but is not limited to, results of pulp testing.
2. Documentation must include recent (within 12 months), dated, and properly identified pretreatment diagnostic full mouth or panoramic radiographic image(s) that include the radiographic apex.
3. When cracked tooth syndrome is a potential diagnosis, chart notes fully describing the presenting signs and symptoms are necessary.
4. Crown to root ratios that are poorer than 1:1 creates an unfavorable situation. Unfavorable crown to root ratios must include an assessment of the patient's full mouth dental condition, medical history, dental history, periodontal history, periodontal continuing care, long term prognosis, age, and occlusion.
5. Updated. See Criteria #2.
6. Endodontic obturation:
    a. Placement of a restoration on a tooth with untreated or unresolved periapical or periradicular pathology will not be considered for benefit.
    b. Placement of a restoration on a tooth with a carious lesion in close proximity to the pulp chamber in the absence of treatment planned endodontic therapy will not be considered for benefit.
    c. Endodontic Obturation: The root canal filling should extend as close as possible to the apical constriction of each canal (ideal 0.5-1.2mm) with appropriate fill density (particularly in the apical 1/3 of the root). Gross overextension (over 2mm beyond canal) or under fill (short over 2mm in the presence of patent canals) should be avoided.
    d. Placement of a restoration on a tooth with internal or external resorption may not be considered for benefit.
7. Benefits for incomplete endodontic therapy, D3332, may be plan dependent.
8. Pulp testing, cleaning, shaping, irrigation, irrigation solutions, irrigation devices, medication placement, intraorifice barrier, temporary access closure, obturation, and treatment of root canal obstruction are generally considered a part of the overall completed endodontic therapy.
9. Retreatment of a previously treated endodontic tooth may be allowed once per tooth per lifetime.
10. Internal and external resorptive lesion with a favorable prognosis (see discussion section)
11. Root canal or endodontic therapy is not appropriate in the absence of pulpal disease, in cases of extensive caries involving the furcation, extensive alveolar bone loss due to periodontal disease, furcation defect/involvement with extensive bone loss/, and internal and external resorption with questionable or unfavorable prognosis.

12. As most health plans include coverage for dental services related to accidental injury, claims for fractured teeth resulting from an external blow or blunt trauma must first be referred to the subscriber/ employee's medical/health plan when performed within the first 12 months post injury. If a tooth is treated for fracture, the fracture must involve missing tooth structure that extends into the dentinal layer.

Indications for Treatment of Primary Teeth (Nonsurgical root canal therapy for primary teeth is indicated if *any* of the following clinical conditions exist):

1. Irreversible pulpitis or pulpal necrosis with no evidence of a permanent successor tooth.
2. Pulpal necrosis with or without evidence of periradicular disease.
3. Treatment will not jeopardize the permanent successor.
4. Adequate alveolar bone with absence of substantial root resorption.

Requirements/Indications for Pulpotomy:

1. Exposed vital pulp or irreversible pulpitis of primary (deciduous) teeth
2. Primary teeth with insufficient root structure or associated periodontal or periapical pathology that may jeopardize permanent tooth development are not indicated for pulpotomy
3. Pre-operative radiographic image of the tooth to be treated
4. A post-operative/post treatment radiographic image is required
5. Used as an emergency procedure in permanent teeth until endodontic therapy can occur. Pulpal debridement is acceptable, but benefits are group dependent.
6. When used as an interim procedure for permanent teeth with immature root formation to allow completion of root formation (apexogenesis)

Requirements/Indications for Apexogenesis:

1. Allowed once per tooth per lifetime
2. Tooth with deep carious lesion likely to result in pulp exposure during excavation
3. No evidence of periapical pathosis
4. Pre-operative radiographic image of the tooth to be treated
5. A post-operative/post treatment radiographic image is required
6. Bleeding is controlled at site exposure when mechanical exposure of a vital tooth occurs
7. Exposure of the pulp occurs when the pulp has been exposed while under a dental dam
8. Adequate seal of the coronal restoration can be maintained
9. Exposure allows for direct pulp cap with vital pulpal tissue
10. Patient informed of possibility of future endodontic therapy

Requirements/Indications for Apicoectomy:

1. Allowed once per root per tooth per lifetime
2. Pre-operative radiographic image of the tooth to be treated
3. A post-operative/post treatment radiographic image is required

4. Periradicular pathology is evident
5. Periradicular lesion that enlarges after completion of initial endodontic therapy (post endodontic therapy -pre, post and follow up radiographic images required documentation)
6. Marked overextension of objurgating materials with periapical pathology
7. Access for curettage and/or biopsy
8. Access to additional root
9. When periapical pathology is present, non-surgical or conventional, including re-treatment endodontia should first be attempted prior to apicoectomy
10. Access when periradicular pathosis cannot be eliminated/adequately treated by non-surgical endodontic therapy (cleaned, shaped and obturated).
11. Appropriate when the root canal demonstrates an inadequate obturation and may or may not have a post and crown
12. Will not be considered when performed in conjunction with root resection surgery on multi-rooted teeth

Requirements/Indications for Root Resection:

1. Periodontal furcation defect with infrabony defect
2. Pre-operative radiographic image of the tooth to be treated
3. A post-operative/post treatment radiographic image is required
4. Vertical root fracture confined to the root to be separated (multi-rooted tooth)
5. Inoperable carious, resorptive, iatrogenic (perforation) root defects
6. Persistent periradicular pathosis where non-surgical root canal therapy or periradicular surgery is not possible
7. Adequate bony support and crown root ratio around remaining roots (see 04-206 Clinical Crown Lengthening)
8. May not be considered when performed in conjunction with any other peri-radicular surgery on multi-rooted teeth.

Requirements/Indications for Decoronation:

1. Allowed once per root per tooth per lifetime
2. Current (within 12 months) pre-operative radiographic image of the tooth to be treated
3. Prior satisfactory root canal therapy required
4. No silver points allowed

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:*
D3220	Therapeutic pulpotomy (excluding final restoration) – removal of pulp coronal to the dentinocemental junction and application of medicament
D3221	Pulpal debridement, primary and permanent teeth
D3222	Partial pulpotomy for apexogenesis – permanent tooth with incomplete root development
D3310	Endodontic therapy, anterior tooth (excluding final restoration)
D3320	Endodontic therapy, bicuspid tooth (excluding final restoration)
D3330	Endodontic therapy, molar (excluding final restoration)
D3331	Treatment of root canal obstruction; non-surgical access
D3332	Incomplete endodontic therapy; inoperable, unrestorable or fractured tooth
D3333	Internal root repair of perforation defects
D3346	Retreatment of previous root canal therapy - anterior
D3347	Retreatment of previous root canal therapy - bicuspid
D3348	Retreatment of previous root canal therapy - molar
D3351	Apexification/recalcification – initial visit (apical closure/calcific repair of perforations, root resorption, etc.)
D3352	Apexification/recalcification – interim medication replacement
D3353	Apexification/recalcification –final visit (includes completed root canal therapy – apical closure/calcific repair of perforations, root resorption, etc.)
D3355	Pulpal regeneration – initial visit
D3356	Pulpal regeneration – interim medication replacement
D3357	Pulpal regeneration
D3410	Apicoectomy - anterior
D3421	Apicoectomy – bicuspid (first root)
D3425	Apicoectomy – molar (first root)
D3426	Apicoectomy – (each additional root)
D3741	Surgical repair of root resorption - anterior
D3472	Surgical repair of root resorption - premolar
D3473	Surgical repair of root resorption - molar
D3501	Surgical exposure of root surface without apicoectomy or repair of root resorption - anterior
D3502	Surgical exposure of root surface without apicoectomy or repair of root resorption – premolar
D3503	Surgical exposure of root surface without apicoectomy or repair of root resorption - molar
D3428	Bone graft in conjunction with periradicular surgery
D3429	Bone graft in conjunction with periradicular surgery, each additional contiguous tooth
D3430	Retrograde filling – per root
D3431	Biological materials to aid in soft and osseous tissue regeneration
D3432	Guided tissue regeneration, resorbable barrier, per site
D3911	Intraorifice barrier. Not to be used as a final restoration.
D3921	Decoronation or submergence of an erupted tooth. Intentional removal of coronal tooth structure for preservation of the root and surrounding bone.

ICD-10 CM Diagnoses for Dental Diseases and Conditions: See the current CDT code book for details

References

1. Guide To Clinical Endodontics; Sixth Edition- 2013: AAE (American Association of Endodontists); Dahlkempe, Ang, Goldberg, Rubin, Schultz, Sheridan, Slingbaum, Stevens, Powell
2. N Y State Dent J. 1999 May; 65(5):23-5; Apexification & apexogenesis; Goldstein S1, Sedaghat-Zandi A, Greenberg M, and Friedman S.
3. Chugal, Spangberg – 2003: Endodontic infection: some biologic and treatment factors associated with outcome: Oral Surg Oral Med Oral Pathol Oral Radiol Endod. July 96(1):81-90
4. Sjorgren 1990: J Endod 16(10):498-504
5. CDT 2024 Current Dental Terminology, American Dental Association

History

Revision History	Version	Date	Nature of Change	SME
	initial	3/24/17	creation	M Kahn G Koumaras
	Revision	1/30/18	Related policies, criteria	M Kahn
	Revision	1/31/18	Endodontic Obturation Discussion	M Kahn
	Revision	2/6/18	Related policies, Appropriateness/medical necessity	M Kahn
	Revision	1/16/19	Annual Revision	Committee
	Revision	09/09/2020	Annual Revision	Committee
	Revised	12/4/20	Annual Revision	Committee
	Revised	10/15/2021	Annual Revision	Committee
	Revised	10/22/2022	Annual Revision	Committee
	Revised	9/13/2023	Annual Revision	Committee