

Dental Clinical Policy: Endodontic Treatment

Reference Number: CP.DP.20

Last Review Date: 12/24

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[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Endodontic procedures aim to prevent and treat diseases or conditions affecting the pulp and peri-radicular tissues of a tooth. Endodontic procedures are indicated following a significant breach to the pulp-dentin complex, commonly associated with deep caries, restorative procedures, cracks or developmental abnormalities. Traumatic dental injuries, with or without dentin loss, may also necessitate endodontic care.

Endodontics specifically involves protection of vital pulpal tissue or removal of diseased or non-vital pulpal tissue, or the correction of deficiencies in previously endodontically treated teeth. Endodontic processes are carried out aseptically and chemo-mechanically removes pulp tissue and disrupt bacterial biofilms. The placement of biocompatible filler and coronal restoration seal the root canal spaces from further bacterial infection. Both non-surgical and surgical modes of intervention can be utilized separately or in tandem but surgical endodontic treatment is commonly used following failure of non-surgical root canal treatment. Endodontic procedures have a high success rate and prolong the survival of a tooth. A successful treatment would resolve and prevent pain, swelling and peri-radicular bone loss associated with the treated tooth.

Policy/Criteria

- I. It is the policy of Envolve Dental Inc.® that vital tooth therapy is **medically necessary** when any of the following conditions are met:
 - A. When caries involvement is near or reaches the pulp of the tooth;
 - B. When there is documented assessment in the patient record showing that a tooth is vital. Tooth has adequate (50% bone or greater) periodontal support and adequate coronal structure for restoration following caries removal;
 - C. When there is a presence of an odontalgia in the absence of a pulpal and peri-radicular infection (swelling, sinus tract or periapical radiolucency) in either permanent or primary teeth;
 - D. When there is Incomplete root formation in permanent teeth;
 - E. When none of the following contraindications are present:
 1. When pre-operative and intra-operative assessment shows the tooth is incapable of tolerating vital pulp therapy, e.g., a diagnosis of pulpal necrosis or percussion tenderness associated with irreversible pulpitis or radicular pulp bleeding which fails to arrest after 5 minutes;
 2. When root resorption is present, either external or internal;
 3. When inadequate periodontal (less than 50% bone) support or insufficient clinical crown structure exists following treatment;
 4. When periodontal furcation involvement is present;
 5. When sub-osseous caries is present;
 6. When a periodontal abscess is present and combined with pulpal infection (i.e., “endo-perio lesion”)
- II. It is the policy of Envolve Dental Inc.® that root canal treatment is **medically necessary** when any of

the following conditions are met:

- A. When there is presence of irreversible pulpitis;
- B. When there is presence of pulpal necrosis;
- C. When there is presence of apical periodontitis;
- D. When necessary to enable retention of a restoration on a broken-down vital tooth (elective root canal treatment);
- E. When a tooth has adequate (50% bone or greater) periodontal support and adequate sound coronal structure for restoration;
- F. When a previous endodontic treatment demonstrates failure due to symptoms and signs with persistent (non-healing) apical periodontitis;
- G. When a previous endodontic treatment is technically inadequate, and a new restoration is planned for the tooth;
- H. When none of the following contraindications are present:
 - 1. When there is Inadequate periodontal support (greater than 50% marginal bone loss) and/or insufficient sound clinical tooth structure to enable predictable restoration following treatment;
 - 2. When there is uncontrolled primary disease;

III. It is the policy of Envolve Dental Inc.® that surgical endodontic therapy is **medically necessary** when any of the following conditions are met:

- A. When a non-surgical approach or intervention has been attempted and deemed inadequate or contraindicated;
- B. When a previously root filled tooth requires retreatment and areas associated with disease would preferentially be visualized and accessed using a surgical approach. These scenarios include: apical transportation and blockage, apical perforation, root fracture, irretrievable fractured instruments, aberrant anatomy, calcified canals, and over-extended root filling material;
- C. When an optimally root-filled tooth exhibits signs and symptoms consistent with persistent apical periodontitis and root canal re-treatment may increase the risk of root fracture due to post removal or involve damage to a restoration such as a fixed prosthesis;
- D. When biopsy of peri-radicular tissue in conjunction with other endodontic procedures is indicated;
- E. When a persistent exudate is present during non-surgical root canal treatment despite repeated chemo-mechanical disinfection procedures;
- F. When none of the following contraindication are present:
 - 1. When a non-surgical approach is unsuccessful or inadequate;
 - 2. When there is unusual bone or root morphology hindering surgical access;
 - 3. When there is involvement or risk to neurovascular structures (e.g., inferior alveolar nerve, nasopalatine nerve and blood vessels);
 - 4. When there are Teeth with poor periodontal support (less than 50% alveolar bone support) or a poor restorative prognosis;
 - 5. When sub-osseous caries is present;
 - 6. When root resorption is present, either external or internal;
 - 7. When the medical history contraindicates surgical management;
 - 8. When there is uncontrolled primary disease;
- G. Required documentation to support medical necessity include the following:
 - 1. Recent (within six months) and dated diagnostic-quality periapical radiographic image(s)

- clearly showing the clinical crown and all root apices;
- 2. Intra-oral photographs where necessary to support conditions not clearly represented with radiographs;
- 3. CBCT where necessary to aid assessment and planning of treatment (subject to state regulations);
- 4. Recent (within six months) and dated six-point periodontal charting and history of previous periodontal therapy is required when radiographic evidence of bone loss exists;
- 5. Valid consent.

Coverage Limitation/Exclusions

- 1. One D3110-D3240 per tooth per lifetime;
- 2. One D3310-D3330 per tooth per lifetime;
- 3. One D3346-D3348 per tooth per lifetime;
- 4. One apexification per tooth per lifetime;
- 5. One pulpal regeneration per tooth per lifetime;
- 6. One apicoectomy per tooth per lifetime;
- 7. Subject to state-specific regulations.

Coding Implications

This clinical policy references Current Dental Terminology (CDT®). CDT® is a registered trademark of the American Dental Association. All CDT codes and descriptions are copyrighted 2024, American Dental Association. All rights reserved. CDT codes and CDT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

Retrospective review/analysis or fraud, waste and abuse initiatives that identify mis-coding (upcoding) resulting in higher reimbursement than allowed for the correctly coded service, or does not provide documentation supporting performing and/or completing claimed services may result in the recoupment of the identified monetary variance by any of the following means: a) from the payment for other claimed services; or b) directly from the provider.

A completed root canal treatment of a tooth that results in an extraction of the same tooth within 30 days of the completed root canal treatment may result in the recoupment of any payment made for the root canal service by any of the following means: a) from the payment for the extraction service; b) from the payment for other claimed services; or c) directly from the provider completing the root canal service.

CDT® Codes	Description
D3110	Pulp cap - direct (excluding final restoration)
D3120	Pulp cap – indirect (excluding final restoration)
D3220	Therapeutic pulpotomy (excluding final restoration)
D3221	Pulpal debridement, primary and permanent teeth
D3222	Partial pulpotomy for apexogenesis

D3230	Pulpal therapy (resorbable filling) – anterior, primary tooth (excluding final restoration)
D3240	Pulpal therapy (resorbable filling) – posterior, primary tooth (excluding final restoration)
D3310	Endodontic therapy, anterior tooth (excluding final restoration)
D3320	Endodontic therapy, premolar tooth (excluding final restoration)
D3330	Endodontic therapy, molar tooth (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; non-surgical
D3346	Retreatment of previous root canal therapy - anterior
D3347	Retreatment of previous root canal therapy - premolar
D3348	Retreatment of previous root canal therapy - molar
D3351	Apexification/Recalcification – initial visit
D3352	Apexification/Recalcification – interim medication placement
D3353	Apexification/Recalcification – final visit
D3355	Pulpal Regeneration – initial visit
D3356	Pulpal Regeneration – interim medication placement
D3357	Pulpal Regeneration – completion of treatment
D3410	Apicoectomy – anterior
D3421	Apicoectomy – premolar (first root)
D3425	Apicoectomy – molar (first root)
D3426	Apicoectomy – each additional root
D3427	Periradicular surgery without apicoectomy
¹ D3428	Bone graft in conjunction with periradicular surgery – per tooth, single site
¹ D3429	Bone graft in conjunction with periradicular surgery – each additional contiguous tooth in the same surgical site
D3430	Retrograde filling – per root
¹ D3431	Biologic materials to aid in soft and osseus tissue regeneration in conjunction with periradicular surgery
¹ D3432	Guided tissue regeneration, resorbable barrier, per site, in conjunction with periradicular surgery
D3450	Root amputation – per root
¹ D3460	Endodontic endosseous implant
D3470	Intentional re-implantation (including necessary splinting)
D3910	Surgical procedure for isolation of tooth with rubber dam
D3920	Hemisection (including any root removal), not including root canal therapy
¹ D3950	Canal preparation and fitting of preformed dowel or post
D3999	Unspecified endodontic procedure, by report

¹ Procedure Not Covered

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM Code	Description
K02.3	Dental caries (decay and cavities)
K02.53	Dental caries on pit and fissure surface penetrating into pulp
K02.63	Dental caries on smooth surface penetrating into pulp
K02.7	Dental root caries
K02.9	Dental carries, unspecified
K03.2	Erosion of teeth
K03.81	Cracked tooth
K03.89	Other specified diseases of hard tissues of teeth
K03.9	Disease of hard tissues of teeth, unspecified
S02.5XXA	Fracture of tooth (traumatic), initial encounter for closed fracture
S02.5XXB	Fracture of tooth (traumatic), initial encounter for open fracture
S02.5XXD	Fracture of tooth (traumatic), subsequent encounter for fracture with routine healing
S02.5XXG	Fracture of tooth (traumatic), subsequent encounter for fracture with delayed healing
S02.5XXK	Fracture of tooth (traumatic), subsequent encounter for fracture with nonunion
S02.5XXS	Fracture of tooth (traumatic), sequela

Reviews, Revisions, and Approvals	Date	Approval Date
Policy developed	6/20	6/20
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Annual Review and Format Change	12/23	12/23
Annual Review	12/24	12/24

References

1. American Dental Association. CDT 2024: Dental Procedure Codes. American Dental Association, 2024.
2. American Academy of Pediatric Dentistry (AAPD) Council on Clinical Affairs. Guideline on Pulp Therapy for Primary and Immature Permanent Teeth. Rev. 2014.
3. American Association of Endodontists (AAE). Guide to Clinical Endodontics, 6th edition. 2013. <https://www.aae.org/specialty/clinical-resources/guide-clinical-endodontics/>.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of dental practice; peer-reviewed dental/medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national dental and health professional organizations; views of dentists practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. Envolve Dental makes no representations and accepts no liability

with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of dental practice current at the time that this clinical policy was approved. “Envolve Dental” means a dental plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Envolve Benefit Options, Inc, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to dental and medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Envolve Dental administrative policies and procedures.

This clinical policy is effective as of the date determined by Envolve Dental. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. Envolve Dental retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute dental or medical advice, dental treatment or dental care. It is not intended to dictate to providers how to practice dentistry. Providers are expected to exercise professional dental and medical judgment in providing the most appropriate care, and are solely responsible for the dental and medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating dentist in connection with diagnosis and treatment decisions.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at <https://www.cms.gov> for additional information.

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