

# Non-Surgical Endodontics

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[Instructions for Use](#)

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## Related Dental Policy

- [Surgical Endodontics](#)

## Coverage Rationale

### Vital Pulp Therapy

#### *Direct Pulp Cap*

**Direct Pulp Capping is indicated for permanent teeth for the following:**

- Tooth has a vital pulp or been diagnosed with reversible pulpitis
- All caries has been removed
- Mechanical exposure of a clinically vital and asymptomatic pulp occurs
- If bleeding can be controlled at the site of exposure

#### *Indirect Pulp Cap*

**Indirect Pulp Capping is indicated for primary teeth or permanent teeth with immature apices for the following:**

- Tooth has a vital pulp or been diagnosed with reversible pulpitis
- Tooth has a deep carious lesion that is considered likely to result in pulp exposure during excavation

### *Therapeutic Pulpotomy*

**Therapeutic Pulpotomy is indicated for the following:**

- Exposed vital pulps or irreversible pulpitis of primary teeth where there is a reasonable period of retention expected (approximately one year)
- As an emergency procedure in permanent teeth until root canal treatment can be accomplished
- As an interim procedure for permanent teeth with immature root formation to allow continued root development

**Therapeutic Pulpotomy is not indicated for the following:**

- Primary teeth with insufficient root structure, internal resorption, furcal Perforation or periradicular pathosis that may jeopardize the permanent successor
- Removal of pulp apical to the dentinocemental junction

### *Partial Pulpectomy for Apexogenesis*

**A partial pulpotomy for Apexogenesis is indicated for the following:**

- In a young permanent tooth for a carious pulp exposure
- A vital tooth, with a diagnosis of normal pulp or reversible pulpitis

### *Apexification/Recalcification*

**Apexification/Recalcification is indicated for the following:**

- Incomplete apical closure in a permanent tooth root

- External root resorption or when the possibility of external root resorption exists
- Necrotic pulp, irreversible pulpitis, or periapical lesion
- For prevention or arrest of resorption
- Perforations or root fractures that do not communicate with oral cavity

**Apexification/Recalcification is not indicated for the following:**

- Tooth with a completely closed apex
- If patient compliance or long term follow up may be questionable

## ***Regenerative Endodontics***

**Pulpal Regeneration is indicated for the following:**

- Permanent tooth with immature apex
- Necrotic pulp

**Pulpal Regeneration is not indicated for the following:**

- If the pulp space would be needed for final restoration
- When the tooth is not restorable

## **Non-Vital Pulp Therapy**

### ***Pulpal Debridement (Pulpectomy)***

**Pulpal Debridement (Pulpectomy) is indicated for the following:**

- A restorable permanent tooth with irreversible pulpitis or a necrotic pulp in which the root is apexified
- The relief of acute pain prior to complete root canal therapy
- A primary tooth, where there is a reasonable period of retention expected (approximately one year)

**Pulpal Debridement (Pulpectomy) is not indicated as definitive endodontic therapy.**

### ***Pulpal Therapy (Resorbable Filling) – Primary Teeth***

**Pulpal therapy for primary teeth is indicated for the following:**

- A restorable primary tooth with irreversible pulpitis or a necrotic pulp in which the root is apexified
- The prognosis for keeping the tooth is up to one year and the tooth root lies in at least 25% bone

## ***Endodontic Therapy***

**Endodontic therapy is indicated for the following:**

- A restorable, mature, completely developed permanent or primary tooth with irreversible pulpitis, necrotic pulp, or frank vital pulpal exposure
- Teeth with radiographic periapical pathology
- Primary teeth without a permanent successor
- When needed for prosthetic rehabilitation

**Endodontic therapy is not indicated for the following:**

- Teeth with a poor long-term prognosis
- Teeth with inadequate bone support or advanced or untreated periodontal disease
- Teeth with incompletely formed root apices

### ***Treatment of Root Canal Obstruction: Non-Surgical Access***

**Treatment of a root canal obstruction is indicated for the following:**

- Biological obstructions
- Iatrogenic ledges
- Separated files or other instruments
- Complete calcification of 50% or more of root length

## ***Incomplete Endodontic Therapy***

The inability to complete endodontic therapy may occur if, during treatment, it becomes apparent that access is not possible, the tooth will not be able to be restored, or the tooth fractures.

## Internal Root Repair of Perforation Defects

Internal root repair of Perforation defects is indicated for the following:

- There is a root Perforation caused by pathology such as resorption or decay
- A communication exists between the pulp space and external root surface as a result of internal root resorption

Internal root repair of Perforation defects is not indicated for the following:

- Teeth that are considered non-restorable
- Teeth with inadequate bone support or advanced untreated periodontal disease

## Retreatment of Previous Root Canal Therapy

Retreatment of previous root canal therapy is indicated for the following:

- Canal fill appears to extend to a point shorter than 2millimeters from the apex, or extends significantly beyond the apex
- Fill appears to be incomplete
- Tooth is sensitive to pressure and percussion or other subjective symptoms
- Placement of a post has the potential to compromise the existing obturation or apical seal of the canal system

## Definitions

**Apexogenesis:** The vital pulp therapy performed to encourage continued physiological formation and development of the tooth root. (ADA)

**Direct Pulp Cap:** A procedure in which the exposed vital pulp is treated with a therapeutic material, followed with a base and restoration, to promote healing and maintain pulp vitality. (ADA)

**Endodontics:** The branch of dentistry which is concerned with the morphology, physiology, and pathology of the human dental pulp and periradicular tissues. Its study and practice encompass the basic and clinical sciences including biology of the normal pulp, the etiology, diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions. (ADA)

**Indirect Pulp Cap:** A procedure in which the nearly exposed pulp is covered with a protective dressing to protect the pulp from additional injury and to promote healing and repair via formation of secondary dentin. (ADA)

**Perforation:** The mechanical or pathologic communication between the root canal system and the external tooth surface. (AAE)

**Pulpal Debridement (Pulpectomy):** The complete removal of vital and non-vital pulp tissue from the root canal space. (ADA)

**Regenerative Endodontics:** Biologically based procedures designed to physiologically replace damaged tooth structures, including dentin and root structures, as well as cells of the pulp-dentin complex. (AAE)

**Recalcification:** A procedure used to encourage biologic root repair of external and internal resorption defects. (ADA)

**(Therapeutic) Pulpotomy:** The removal of a portion of the pulp, including the diseased aspect, with the intent of maintaining the vitality of the remaining pulpal tissue by means of a therapeutic dressing. (ADA)

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

| CDT Code | Description                                     |
|----------|-------------------------------------------------|
| D3110    | Pulp cap – direct (excluding final restoration) |

| CDT Code | Description                                                                                                                                                 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D3120    | Pulp cap – indirect (excluding final restoration)                                                                                                           |
| 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                                                                       |
| 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                                                                                                                 |
| 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 (apical closure/calcific repair of perforations, root resorption, etc.)                                       |
| D3352    | Apexification/recalcification – interim medication visit (apical closure/calcific repair of perforations, root resorption, pulp space disinfection, etc.)   |
| 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 medicament replacement                                                                                                        |
| D3357    | Pulpal regeneration – completion of treatment                                                                                                               |
| D3911    | Intraorifice barrier                                                                                                                                        |
| D3921    | Decoronation or submergence of an erupted tooth                                                                                                             |

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## Description of Services

Non-surgical endodontic treatment is the use of biologically acceptable chemical and mechanical treatments of the root canal system to promote healing and repair of the periradicular tissues. Additional surgical procedures may be required to remove posts and manage canal obstructions, radicular defects, aberrant canal morphology, ledges, or perforations. Intra-operative radiographs, intraorifice barriers, decoronation and submergence of endodontically treated teeth, and all appointments necessary to complete an endodontic procedure are inclusive.

Pursuant to CA AB2585: While not common in dentistry, nonpharmacological pain management strategies should be encouraged if appropriate.

## References

American Academy on Pediatric Dentistry Council on Clinical Affairs. Guideline on pulp therapy for primary and immature permanent teeth. 2014. Revised 2020.

American Association of Endodontists Glossary of Endodontic Terms, 9<sup>th</sup> edition, 2019.

American Association of Endodontists Guide to Clinical Endodontics, 6<sup>th</sup> edition, updated 2013.

American Association of Endodontists. Endodontics Colleagues for Excellence, Spring 2013b.

American Dental Association (ADA) CDT Codebook 2024.

American Dental Association (ADA) Glossary of Clinical and Administrative Terms.

Guideline History/Revision Information

| Date       | Summary of Changes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/01/2024 | <b>Template Update</b> <ul style="list-style-type: none"><li>Modified font style; no change to policy content</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 02/01/2024 | <b>Template Update</b> <ul style="list-style-type: none"><li>Updated <i>Instructions for Use</i> to clarify this policy applies to both Commercial and Medicare Advantage plans</li></ul> <b>Coverage Rationale</b> <ul style="list-style-type: none"><li>Replaced language indicating “pulpal regeneration is indicated when tooth is not restorable” with “pulpal regeneration is <i>not</i> indicated when <i>the</i> tooth is not restorable”</li><li>Removed content addressing coverage limitations</li></ul> <b>Supporting Information</b> <ul style="list-style-type: none"><li>Updated <i>References</i> section to reflect the most current information</li><li>Archived previous policy version DCG009.10</li></ul> |

Instructions for Use

This Dental Coverage Guideline provides assistance in interpreting UnitedHealthcare standard and Medicare Advantage dental plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard dental plan. In the event of a conflict, the member specific benefit plan document governs. Before using this guideline, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Dental Coverage Guideline is provided for informational purposes. It does not constitute medical advice.