NON-SURGICAL ENDODONTICS

Guideline Number: DCG09.04

Effective Date: January 1, 2019

Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVERAGE RATIONALE</td>
<td>1</td>
</tr>
<tr>
<td>DEFINITIONS</td>
<td>3</td>
</tr>
<tr>
<td>APPLICABLE CODES</td>
<td>4</td>
</tr>
<tr>
<td>DESCRIPTION OF SERVICES</td>
<td>4</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>4</td>
</tr>
<tr>
<td>GUIDELINE HISTORY/REVISION INFORMATION</td>
<td>5</td>
</tr>
<tr>
<td>INSTRUCTIONS FOR USE</td>
<td>5</td>
</tr>
</tbody>
</table>

**COVERAGE RATIONALE**

**Vital Pulp Therapy**

**Direct Pulp Cap**

Direct Pulp Capping is indicated 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
- Bleeding is controlled at the exposure site
- Exposure permits the capping material to make direct contact with the vital pulp tissue
- Exposure occurs when the tooth is under dental dam isolation
- Adequate seal of the coronal restoration can be maintained
- Patient has been fully informed that endodontic treatment may be indicated in the future

Direct Pulp Capping is not indicated for a carious exposure in primary teeth.

**Indirect Pulp Cap**

Indirect Pulp Capping is indicated 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
- No history of subjective pretreatment symptoms
- Pretreatment radiographs should not show periradicular pathosis

**Therapeutic Pulpotomy**

Therapeutic Pulpotomy is indicated for the following:
- Exposed vital pulps or irreversible pulpitis of primary teeth
- Any bleeding was controlled within several minutes
- 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
- In primary teeth, where there is a reasonable period of retention expected (approximately one year)

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
- As the first stage of complete root canal therapy
- Removal of pulp apical to the dentinocemental junction
- For primary teeth that are near exfoliation or less than 50% of the tooth root remains

**Partial Pulpectomy for Apexogenesis**

A partial pulpotomy for Apexogenesis is indicated for the following:
- In a young permanent tooth for a carious pulp exposure
- When the pulp bleeding is controlled within several minutes
• 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

_Pulpal Regeneration_

_Pulpal Regeneration is indicated for the following:_
• Permanent tooth with immature apex
• Necrotic pulp
• Pulp space not needed for post/core or final restoration
• When tooth is not restorable

_Pulpal Regeneration is not indicated for the following:_
• Primary teeth
• The pulp space would be needed for final restoration

_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 for the following:_
• Complete root canal therapy of an infected or necrotic tooth
• Primary teeth that are near exfoliation or less than 50% of the tooth root remains

_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

_Pulpal therapy is not indicated for the following:_
• Primary teeth that are near exfoliation or less than 50% of the tooth root remains
• Permanent teeth

_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
• Trauma
• When needed for prosthetic rehabilitation

_Endodontic therapy is not indicated for the following:_
• Teeth with a poor long term prognosis
• Teeth that are considered non-restorable
• 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:

- When there is an obstruction of the root canal system, (biological, iatrogenic ledges or post removal) and endodontic retreatment is needed
- Removal of obstruction is complex and/or requires significant time

Treatment of a root canal obstruction is not indicated when there is no obstruction evident.

Incomplete Endodontic Therapy: Inoperable, Unrestorable or Fractured Tooth

Incomplete endodontic therapy is indicated for the following:

- During endodontic treatment of a tooth, it becomes apparent that the procedure cannot be successfully completed
- The tooth will not be able to be restored, or the tooth fractures, necessitating discontinuation of treatment

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 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
- The existing Endodontics is poor
- Placement of a post has the potential to compromise the existing obturation or apical seal of the canal system
- The canal is accessible and allows for retreatment with a non-surgical procedure

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)

Pulpal Regeneration: The biologically based procedures designed to replace damaged 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 Clinical Policies and Coverage Guidelines may apply.

<table>
<thead>
<tr>
<th>CDT Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>D3110</td>
<td>Pulp cap – direct (excluding final restoration)</td>
</tr>
<tr>
<td>D3120</td>
<td>Pulp cap – indirect (excluding final restoration)</td>
</tr>
<tr>
<td>D3220</td>
<td>Therapeutic pulpotomy (excluding final restoration) – removal of pulp coronal to the dentinocemental junction and application of medicament</td>
</tr>
<tr>
<td>D3221</td>
<td>Pulpal debridement, primary and permanent teeth</td>
</tr>
<tr>
<td>D3222</td>
<td>Partial pulpotomy for apexogenesis – permanent tooth with incomplete root development</td>
</tr>
<tr>
<td>D3230</td>
<td>Pulpal therapy (resorbable filling) – anterior, primary tooth (excluding final restoration)</td>
</tr>
<tr>
<td>D3240</td>
<td>Pulpal therapy (resorbable filling) – posterior, primary tooth (excluding final restoration)</td>
</tr>
<tr>
<td>D3310</td>
<td>Endodontic therapy, anterior tooth (excluding final restoration)</td>
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<tr>
<td>D3320</td>
<td>Endodontic therapy, premolar tooth (excluding final restoration)</td>
</tr>
<tr>
<td>D3330</td>
<td>Endodontic therapy, molar tooth (excluding final restoration)</td>
</tr>
<tr>
<td>D3331</td>
<td>Treatment of root canal obstruction; non-surgical access</td>
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<tr>
<td>D3332</td>
<td>Incomplete endodontic therapy; inoperable, unrestorable or fractured tooth</td>
</tr>
<tr>
<td>D3333</td>
<td>Internal root repair of perforation defects</td>
</tr>
<tr>
<td>D3346</td>
<td>Retreatment of previous root canal therapy – anterior</td>
</tr>
<tr>
<td>D3347</td>
<td>Retreatment of previous root canal therapy – premolar</td>
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<tr>
<td>D3348</td>
<td>Retreatment of previous root canal therapy – molar</td>
</tr>
<tr>
<td>D3351</td>
<td>Apexification/recalcification – initial visit (apical closure/calcific repair of perforations, root resorption, etc.)</td>
</tr>
<tr>
<td>D3352</td>
<td>Apexification/recalcification – interim medication visit (apical closure/calcific repair of perforations, root resorption, pulp space disinfection, etc.)</td>
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<tr>
<td>D3353</td>
<td>Apexification/recalcification – final visit (includes completed root canal therapy – apical closure/calcific repair of perforations, root resorption, etc.)</td>
</tr>
<tr>
<td>D3355</td>
<td>Pulpal regeneration – initial visit</td>
</tr>
<tr>
<td>D3356</td>
<td>Pulpal regeneration – interim medicament replacement</td>
</tr>
<tr>
<td>D3357</td>
<td>Pulpal regeneration – completion of treatment</td>
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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 and all appointments necessary to complete a procedure are inclusive.

REFERENCES

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

Non-Surgical Endodontics
UnitedHealthcare Dental Coverage Guideline
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GUIDELINE HISTORY/REVISION INFORMATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Action/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/01/2019</td>
<td>• Reorganized policy template:</td>
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<tr>
<td></td>
<td>o Simplified and relocated Instructions for Use</td>
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<tr>
<td></td>
<td>o Removed Benefit Considerations section</td>
</tr>
<tr>
<td>01/01/2019</td>
<td>• Updated supporting information to reflect the most current references; no change</td>
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<tr>
<td></td>
<td>to coverage rationale or list of applicable codes</td>
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<td></td>
<td>• Archived previous policy version DCG009.03</td>
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INSTRUCTIONS FOR USE

This Dental Coverage Guideline provides assistance in interpreting UnitedHealthcare standard dental benefit 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.