



Dental Clinical Policy

Subject: Crowns, Inlays, and Onlays
Guideline #: 02 -701
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Description

This document addresses indirect restorative procedures including inlays, onlays, and partial and full crown restorations of single (or individual) teeth. Placement of an indirect restoration may be indicated when a tooth is compromised by extensive decay, defective large restorations, or traumatic fracture of the tooth. When the tooth cannot be reasonably restored to functionality either with an amalgam or resin-based composite restoration, an indirect restoration may be an appropriate choice.

The plan performs review of crowns, inlays, and onlays 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.

Note: Depending upon group contracts, benefits are payable upon either preparation date or cementation date of the permanent indirect restoration.

Documentation Requirements

Must include current (within 1 year), dated, and properly identified pretreatment diagnostic radiographic image/s that include the radiographic apex. Clinical chart notes, intra-oral photographs, current dated 6-point periodontal charting, and history of periodontal therapy may also be required (see below).

Adjunctive Documentation

When the indication for crowns, inlays, or onlays, either initial or replacement, is not obvious by radiographic image, the image must be accompanied by additional diagnostic information such as intra-oral photographs of the affected tooth/teeth as well as clinical chart notes stating the rationale for indirect restoration coverage.

Criteria

1. An anterior tooth must demonstrate significant loss of the coronal tooth structure due to caries, fracture, or defective restoration and/or involvement of one or both incisal angles or cusp tip, in the case of canines.
2. A posterior tooth must demonstrate either significant missing tooth structure due to caries, fracture, or defective restoration and/or large restorations that compromise function, or loss of support for the cusps where the cusps are undermined (one or more cusps).
3. 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. If a tooth is treated for fracture, the fracture must involve missing tooth structure that extends into the dentinal layer.
4. Teeth with developmental grooves or craze lines confined to the tooth enamel do not qualify for indirect restoration coverage.
5. Anterior teeth that have been treated by endodontic therapy will be considered for indirect restoration coverage when meeting the criteria as stated above in criteria number 1. An anterior tooth that has had root canal therapy alone does not qualify for indirect restoration coverage, unless it can be demonstrated that there is significant loss of tooth structure including the incisal angles.
6. The periodontal health of teeth to be restored by indirect restoration placement must be considered. Teeth demonstrating uncontrolled or untreated periodontal disease, evidenced by radiographic or periodontal charting, loss of supporting bone including furcation, may not be considered for indirect restoration placement unless the treating dentist can demonstrate that definitive periodontal therapy and periodontal maintenance have been successfully performed, or the treatment plan includes periodontal therapy, the success of which will be evaluated prior to approval for the indirect restoration. The current periodontal status and history of periodontal therapy, presence of tooth mobility, and continuous maintenance therapy may be requested prior to benefit determination. Current dated 6-point periodontal chart may be required.
7. Indirect restorations placed for repair of complications from attrition, abrasion, erosion, or abfraction are not a covered benefit according to most group contracts.
8. A tooth must exhibit significant structural loss from decay, fracture, or trauma. This benefit is group contract dependent.
9. The delivery date of an indirect restoration is considered the date of initial cementation or bonding, regardless of the type of cement or bonding agent used for placement. The type of cement used, e.g. permanent or temporary, is not a determinate for the delivery date. Regarding payment of benefits, the date of service may be contract dependent.
10. The endodontic status of a tooth must be considered (included but not limited to):
 - a. Placement of an indirect restoration on a tooth with untreated or unresolved periapical or periradicular pathology will not be considered for benefit. See Dental Policy 03-001 Endodontic Therapy.
 - b. Placement of an indirect restoration on a tooth with an unresolved carious lesion in close proximity to the pulp chamber in the absence of treatment planned endodontic therapy. See Dental Policy 03-001 Endodontic Therapy.
 - 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. Gross

overextension (over 2mm beyond canal) or under fill (short over 2mm in the presence of patent canals) should be avoided. See Dental Policy 03-001 Endodontic Therapy.

- d. Placement of an indirect restoration on a tooth with internal or external resorption may not be considered for benefit. See Dental Policy 03-001 Endodontic Therapy.
11. Replacement of indirect restorations due to “metal allergy/sensitivity” will be considered only upon submission of documentation by a physician with the associated allergy report.
12. A temporary or provisional crown will be considered a component part of the final restoration and not eligible for a separate benefit.
13. For a primary tooth within an adult dentition to be considered for full coverage indirect restoration placement, radiographic images of the primary tooth must demonstrate an intact root structure, adequate periodontal support with no evidence of active periodontal disease, and occlusal function with an opposing tooth where the primary tooth meets criteria for full coverage indirect restoration coverage. Radiographic imaging must demonstrate no permanent tooth successor present or the permanent tooth successor is unlikely to erupt.
14. Full coverage indirect restorations placed for occlusal alterations and/or changes in vertical dimension or for the treatment of TMJ or craniomandibular disorders do not meet criteria for benefits and will not be considered.
15. For cracked tooth syndrome, an indirect restoration is appropriate only when all of the following condition(s) necessary to support the diagnosis and treatment plan have been met and documented in the chart notes/ patient records.
 - a. Chart documentation of patient’s oral complaints and current symptoms including onset, frequency and duration
 - b. Symptoms including pain/discomfort upon biting (or release of biting), pressure – verified by clinical evaluation
 - c. Include oral evaluation and any contributing factors
 - d. The diagnosis
 - e. Endodontic evaluation – no irreversible pulpal involvement necessitating endodontic therapy
 - f. Structural integrity of the tooth must not be compromised beyond the point of being able to restore the tooth to function
 - g. Must not have a root fracture (vertical or horizontal) below the soft tissue attachment level in radiographic images
 - h. The plan may request additional information as is appropriate for clarification. A narrative is not considered appropriate review material.
16. Updated
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21. When splinting of indirect restorations is requested, whether for periodontal, orthodontic, or other splinting purposes, a determination will be made regarding whether the splinted teeth merit indirect restorations on their own right based on all the above criteria.
22. For third molar teeth, the completed crown must be in occlusal function with an opposing tooth (must occlude with at least 1/3 of an opposing tooth; exceptions may have to be considered for crowns supporting removable or fixed partial dentures. (group contract dependent).

23. Teeth that are discolored, misshapen or have compromised cosmetics do not qualify for indirect restoration coverage.
24. Crowns placed for correction of developmental or congenital defects are not covered.
25. Crown to root ratios that are poorer than 1:1 creates a less than ideal 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, age, and occlusion.
26. Benefits may not be available for indirect restoration/s placed to treat TMD (group contract dependent).
27. Age limitation for indirect restorations is group contract dependent.
28. Benefits will not be considered for closure of contacts unless caused by caries, tooth fracture, defective restoration.
29. Benefits for indirect restorations will not be considered when subgingival/subosseous caries may potentially compromise supracrestal tissue attachment (STA formerly referred to as biologic width) without addressing restorative and periodontal considerations.
30. Indirect restorations may be alternated to a composite or amalgam restoration (contract dependent).
31. Indirect restorations placed for the sole purpose of functioning as survey crowns or guide plane for a removable partial denture are not a covered benefit.
32. Benefits for indirect restorations will not be considered when the tooth exhibits caries into the furcation.

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:

D2510	Inlay – metallic – one surface
D2520	Inlay – metallic – two surface
D2530	Inlay – metallic – three or more surface
D2542	Onlay – metallic – two surface
D2543	Onlay – metallic – three surface
D2544	Onlay – metallic – four or more surfaces
D2610	Inlay – porcelain/ceramic – one surface
D2620	Inlay – porcelain/ceramic – two surfaces
D2630	Inlay – porcelain/ceramic – three surfaces
D2642	Onlay – porcelain/ceramic – two surfaces
D2643	Onlay – porcelain/ceramic – three surfaces
D2644	Onlay – porcelain/ceramic – four or more surfaces
D2650	Inlay – resin-based composite – one surface
D2651	Inlay – resin-based composite – two surfaces
D2652	Inlay – resin-based composite – three or more surfaces

D2662	Onlay – resin-based composite – two surface
D2663	Onlay – resin-based composite – three surface
D2664	Onlay – resin-based composite – four or more surfaces
D2710	Crown – resin-based composite (indirect)
D2712	Crown – ¾ resin based composite (indirect)
D2720	Crown – resin with high noble metal
D2721	Crown –resin with predominantly base metal
D2722	Crown – resin with noble metal
D2740	Crown – porcelain/ceramic substrate
D2750	Crown – porcelain fused to high noble metal
D2751	Crown – porcelain fused to predominantly base metal
D2752	Crown - porcelain fused to high noble metal
D2780	Crown – ¾ cast high noble metal
D2781	Crown – ¾ cast predominantly base metal
D2782	Crown – ¾ cast noble metal
D2783	Crown – ¾ porcelain/ceramic
D2790	Crown – full cast high noble metal
D2791	Crown – full cast predominantly base metal
D2792	Crown – full cast noble metal
D2794	Crown – titanium
D2799	Interim provisional crown – further treatment or completion of diagnosis necessary prior to final impression
D2929	Prefabricated porcelain/ceramic crown – primary tooth
D2928	Prefabricated porcelain/ceramic crown – permanent tooth
D2930	Prefabricated stainless steel crown – primary tooth
D2931	Prefabricated stainless steel crown – permanent tooth
D2932	Prefabricated resin crown
D2933	Prefabricated stainless steel crown with resin window
D2934	Prefabricated esthetic coated stainless-steel crown – primary tooth
D2971	Additional procedures to customize a crown to fit under an existing partial denture framework. This procedure is in addition to the separate crown procedure documented with its own code.

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

References

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3. American Academy of Prosthodontists Glossary of Prosthodontic Terms;

4. http://www.academyofprosthodontics.org/_Library/ap_articles_download/GPT8.pdf. (Accessed January 14, 2016)
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10. American Dental Association Glossary of Clinical and Administrative Terms: <http://www.ada.org/en/publications/cdt/glossary-of-dental-clinical-and-administrative-ter>. (Accessed February 1, 2016)
11. Rosenstiel S, Land M, Fujimoto J. Contemporary Fixed Prosthodontics, 5th ed. St. Louis: Mosby c2016. Part 1: Planning and Preparation, Chapter 3 – Treatment Planning: Pgs 77-85
12. CDT 2023 Current Dental Terminology, American Dental Association

History

Revision History	Version	Date	Nature of Change	SME
	revised	3/4/19	External facing policy	Committee
	Revised	4/22/19	Criteria numbering	Kahn
	Revised	7/3/19	verbiage	Committee
	Revised	8/26/20	Annual Review	Committee
	Revised	12/4/20	Annual Revision	Committee
	Revised	10/06/2021	Annual Revision	Committee
	Revised	10/21/2022	Annual Revision	Committee
	Revised	8/23/2023	Annual Revision	Committee

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