



Dental Clinical Policy

Subject: Core Buildup - includes post and core procedures

Guideline #: 02 -901

Publish Date: 01/01/2023

Status: Revised

Last Review Date: 10/21/2022

Description

A building up of coronal tooth structure meets generally accepted standards of dental care when there is insufficient remaining tooth structure and/or retention to retain a full coverage indirect restoration. A core buildup is not for:

- pulpal insulation
- a filler to eliminate any undercut, box form
- concave irregularity in a tooth preparation.

The plan performs review of [core buildups] due to contractual requirements that necessitate that 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.

Documentation Criteria #1

Must include most recent, dated, 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 Criteria #2

When an indication for core buildup is not obvious by radiographic image, in conjunction with an initial or replacement crown, additional diagnostic information is required.

- Clinical chart notes stating rationale
- Intra-oral photographs
- Image of initial placement when radiographic images do not demonstrate need after existing restoration removal

Criteria

1. Documentation - See above
2. Adjunctive documentation - See above
3. For posterior teeth, a core buildup and/or post and core are a covered benefit only under the following circumstances:

- a. A significant portion of missing tooth structure due to caries, fracture, or defective restoration.
 - b. Insufficient tooth structure coronal to the intended restorative margin for adequate retention.
 - c. A crown or retainer is either existing (to be recemented/rebonded) or is treatment planned.
4. Endodontic treatment of an anterior tooth does not automatically constitute necessity for a core buildup or post and core. For anterior teeth, a core buildup and/or post and core are a covered benefit only under the following circumstances:
 - a. A significant portion of missing tooth structure due to caries, fracture, or defective restoration. (Previously noted as d. in 10/06/2021 version)
 - b. Insufficient tooth structure coronal to the intended restorative margin for adequate retention. (Previously noted as a. in 10/06/2021 version)
 - c. A crown or abutment is either existing (to be recemented) or is treatment planned. (Previously noted as b. in 10/06/2021 version)
5. Core buildup will not be considered when submitted for the purpose of pulp capping, insulation or protection of pulp, undercut block-outs, enhancement of box-form and fillers for reduction of final restorative material.
6. Updated.
7. The diagnosis of “Cracked Tooth Syndrome” may not qualify a tooth for a core buildup.
8. Core buildups placed for repair of complications from attrition, abrasion, erosion, or abfraction are not covered services.
9. Core buildups will not be considered for partial coverage indirect restorations, e.g. onlays, inlays, veneers, or $\frac{3}{4}$ crowns.
10. For a primary tooth to be considered for a core buildup, the tooth must meet the same criteria for treatment as a permanent tooth. For a primary tooth within an adult dentition to be considered for a core buildup, 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.
11. The periodontal health of the tooth and adjacent structures must be considered. Teeth demonstrating uncontrolled or untreated periodontal disease, evidenced by loss of supporting bone, will not be considered for core buildup placement.
12. Updated.
13. Updated.
14. Updated.
15. 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.
16. Benefits for core buildups 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.
17. The endodontic status of a tooth must be considered (including but not limited to):
 - a. Untreated or unresolved periapical or periradicular pathology will not be considered for benefit. See Dental Policy 03-001 Endodontic Therapy.

- b. Unresolved lesion in close proximity to the pulp chamber in the absence of treatment planned endodontic therapy. See Dental Policy 03-001 Endodontic Therapy.
 - c. A tooth with an overfill/underfill root canal obturation or poor condensation may not be considered. See Dental Policy 03-001 Endodontic Therapy.
 - d. Teeth with internal or external resorption may not be considered for benefit.
18. Core buildups performed for correction of developmental or congenital defects are not covered.
 19. Depending upon group contracts, a buildup may be alternated to a one surface restoration in instances where root canal therapy is done through a retained existing crown.
 20. For core buildup determination 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).

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:

- D2950 core buildup, including any pins when required
- D2952 post and core in addition to crown, indirectly fabricated
- D2953 each additional indirectly fabricated post – same tooth
- D2954 prefabricated post and core in addition to crown
- D2957 each additional prefabricated post – same tooth
- D2955 post removal

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

References

1. Huang TJ, Schilder H and Nathanson D. Effects of moisture content and endodontic treatment on some mechanical properties of human dentin. J Endod 1992;18:209.215.
2. Smidt A and Venezia E. Techniques for immediate core buildup of endodontically treated teeth. Quin Int 2003;34:258.268.
3. Pontius O and Hutter JW. Survival rate on fracture strength of incisors restored with different post and core systems and endodontically treated incisors without coronoradicular reinforcement. J Endod;28:710 .715.
4. CDT 2023 Current Dental Terminology, American Dental Association
5. Trope M, Maltz DO and Tronstad L. Resistance to fracture of Endodontically treated teeth. Endo Dent Traumatol 1985;1:108.111
6. Christensen, G. J., Building up tooth preparation for crowns—2000. J Amer Dent Assoc 2000;151:505 .506.

7. Cheung W. A review of the management of endodontically treated teeth: Post, core, and the final restoration. J Amer Dent Assoc 2005;136:611-619.
8. Fundamentals of Operative Dentistry. Summitt JB, Robbins JW, Hilton T and Schwartz RS. Third edition. Quintessence. 2006.
9. Dietschi D, Duc O, et al. Biomechanical considerations for the restoration of endodontically treated teeth: a systematic review of the literature – part 1: composition and micro. and macrostructure alterations. Quin Int 2007;38:733-743.
10. Slutzky-Goldberg I, Slutzky H, Gorfil C and Smidt A. Restoration of endodontically treated teeth. Review and treatment recommendations. Int J Dent 2009;Article ID 150251, 9 pp.
11. ENDODONTICS. Fall/Winter 1995. Restoring endodontically treated teeth. American Association of Endodontists. 211 E Chicago Ave. Chicago Ill.
12. Heydecke G, Butz F and Strub JR. Fracture strength and survival rate of endodontically treated maxillary incisors with approximal cavities after restoration with different post and core systems: an in.vitro study. J Dent 2001; 29:427-433.
13. Papa J, Cain C and Messer HH. Moisture content of vital vs endodontically treated teeth. Endod Dent Traumat 1994; 10:91-93.
14. Christensen, G. J., When to use fillers, buildups or post and cores. J Amer Dent Assoc 1996;127:1397-1398.
15. Guzy GE and Nicholls JI. In vitro comparison of intact endodontically treated teeth with and without endo.post reinforcement. J Prosth Dent 1979;42:39-44.
16. Sorensen JA and Martinoff JT. Intracoronal reinforcement and coronal coverage: a study of endodontically treated teeth. J Prosth Dent 1984;51:780-784.
17. Sedgley CM and Messer HH. Are endodontically treated teeth more brittle? J Endod 1992;18:332-335.
18. Morgano SM, Restoration of pulpless teeth: application of traditional Principles in present and future contexts. J Prosth Dent;75:375-380.

History

Revision History	Version	Date	Nature of Change	SME
	Revision	03/04/2019	External facing policy	Committee
	Revision	04/22/2019	Criteria numbering	Kahn
	Revision	07/23/2019	Verbiage	Committee
	Revision	08/26/2020	Annual Review	Committee
	Revision	12/04/2020	Annual Review	Committee
	Revision	10/06/2021	Annual Review	Committee
	Revision	03/15/2022	Syntax Corrections	AP/SD/DSB
	Revision	10/21/2022	Annual Review	Committee

Federal and State law, as well as contract language, takes precedence over Dental Clinical Policy. Dental Clinical Policy provides guidance in interpreting dental benefit application. The Plan reserves

the right to modify its Dental Clinical Policies and guidelines periodically and as necessary. Dental Clinical Policy is provided for informational purposes and does not constitute medical advice. These Policies are available for general adoption by any lines of business for consistent review of the medical or dental necessity and/or appropriateness of care of dental services. To determine if a review is required, please contact the customer service number on the member's card.

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from the Plan.

Current Dental Terminology - CDT © 2023 American Dental Association. All rights reserved.