
Delta Dental of Ohio Clinical Criteria for Utilization Management Decisions

Clinical Criteria for Restorative Substructures

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Introduction

This Delta Dental of Ohio clinical criteria document addresses criteria for the planning and provision of restorative substructures. The purpose of this document is to provide written clinical criteria to ensure that Delta Dental of Ohio consistently applies sound and objective clinical evidence when determining the medical necessity and clinical appropriateness of restorative substructure placement, as well as taking individual patient circumstances and the local delivery system into account.

Restorative substructures are utilized in association with the preparation of single crowns or fixed partial denture retainer crowns (hereinafter referred to as crowns). The purpose of restorative substructures is to build up coronal structure when a tooth would have insufficient strength and retention for a crown without placement of a substructure.

- The core buildup restorative substructure refers to the procedure for restoring missing coronal structure of a tooth with a suitable restorative material that will have the strength and retentive characteristics to maintain a full coverage crown against displacement under occlusal function. Depending on the preoperative condition of a tooth's original coronal structure, one or more retentive pins may be placed to help retain the core material. Once placed, the core buildup is treated as if it is tooth structure and the appropriate crown preparation is performed. The core buildup procedure must be differentiated from placement of a restorative foundation filler where a tooth's original coronal structure is sufficiently intact to retain a crown after crown preparation, but where elimination of undercuts and other irregularities is desirable to yield a more ideal crown preparation form. If a restorative foundation procedure is submitted as a core buildup procedure, benefit payment will be disapproved.
- The post and core restorative substructure refers to the procedure for building up a core restorative material around a post secured in the root of a tooth that has undergone complete and successful endodontic treatment. Post and core substructures are utilized in an endodontically treated tooth when a core is required for crown retention and anatomic features alone are insufficient to retain the core material. Prefabricated posts may be placed by a direct post and core procedure or posts may be indirectly fabricated and delivered as a single post and core unit.
- Restorative substructures may be performed by general dentists, pediatric dental specialists, prosthodontists or endodontic specialists in a variety of healthcare facilities.

Applicable Dental Procedure Codes

The following dental procedure codes defined in the current version of the American Dental Association's Code on Dental Procedures and Nomenclature (the CDT® Code) are applicable to this document and are the appropriate codes to use when documenting restorative substructures. Inclusion of these codes here is for informational purposes only and does not imply benefit coverage or noncoverage of a procedure by a member's dental plan. A determination that a dental procedure is medically necessary and clinically appropriate does not guarantee that the procedure is a covered benefit of a member's dental plan. To determine if restorative substructures are covered benefits of an individual member's dental plan, please refer to the plan documents in effect on the date of service.

CDT® Procedure Code	Procedure Code Nomenclature
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

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Clinical Criteria¹

When approval of benefit payment for a restorative substructure by a member's dental plan requires a determination by Delta Dental of Ohio that the procedure is medically necessary and clinically appropriate, the patient's dental record must document a generally accepted indication for performing the procedure. The following conditions are generally considered to be indications for placing a restorative substructure:

- **Core Buildup Substructure:** A preoperative assessment shows that 50 percent or more of original coronal tooth structure is missing due to caries or fracture resulting in insufficient retention for a crown.

Insufficient retention exists when enough original tooth structure has been lost that a crown preparation by itself cannot create the opposing vertical walls in a preparation that create the retention form which provides a resistance to the crown being displaced from the tooth under occlusal forces. In that situation, proper placement of a core material in a tooth that is otherwise suitable to support a crown allows the crown preparation to have adequate vertical length of opposing walls that supports retention of the crown. Examples of tooth structure loss where a crown preparation by itself would have insufficient retention include a posterior tooth that has lost 180 degrees or more of its coronal structure circumferentially within a few millimeters of where a crown preparation finish line needs to be placed or where an anterior tooth has lost a substantial portion of its coronal structure mesiodistally from the incisal edge down to within a few millimeters of a crown preparation finish line.

- **Post and Core Substructure:** A preoperative assessment shows that the tooth (1) has had successful completion of endodontic therapy, (2) needs a crown to protect the remaining tooth structure or to support a fixed partial denture, (3) requires a core buildup due to missing tooth structure, (4) needs a post to retain a core material and (5) has sufficient root length to accommodate the post.

For patients who do not meet the published qualifying criteria for restorative substructures, Delta Dental of Ohio will consider documentation from relevant clinicians that explains the necessity of covering substructures for conditions not included in the criteria.

Depending on the clinical circumstances, the placement of restorative substructures under the following conditions may be considered not medically necessary, inadvisable or deficient in clinical quality and may result in disapproval of benefits based on a professional determination that treatment is not medically necessary or not clinically appropriate:

¹ Government regulations or the provisions of a member's dental plan that define when a dental procedure may be considered medically necessary and clinically appropriate with respect to benefit coverage may take precedence over these clinical criteria.

- Teeth with an original coronal structure that will provide sufficient strength and retention for a crown without placement of a restorative substructure
- Restorative substructures not performed in conjunction with a crown, e.g., performed as a definitive amalgam or resin-based composite restoration or submitted with an inlay, onlay, veneer or three-quarter crown
- Teeth where the evidence shows that only a restorative foundation filler was placed to eliminate an undercut, box form, or concave irregularity in a crown preparation.
- A restorative substructure placed on a tooth that is broken down by dental caries, extensive restoration and/or fracture with insufficient sound tooth structure for successful restoration
- A restorative substructure placed on a tooth that has unresolved periapical pathology, failed endodontic treatment, an improperly aligned post and/or failed root integrity due to root fracture or resorptive defect
- A restorative substructure placed on a tooth that has insufficient alveolar bone support, advanced furcation involvement and/or advanced mucogingival defects
- A restorative substructure placed on a primary tooth undergoing natural exfoliation
- A restorative substructure placed on a tooth without allowing adequate healing time following crown lengthening
- Inadequately prepared/adapted restorative substructures
- Allergy to a material in a restoration (e.g., nickel)
- A high caries risk and/or poor oral hygiene that presents a relative contraindication to restorative treatment
- Compromised temporomandibular joint likely to cause complications during or after restorative treatment
- An alternative treatment is more appropriate for a patient's condition or circumstance based on accepted standards of care

Other Considerations

When the payment of benefits for a dental procedure by a member's dental plan depends on the application of clinical criteria to determine whether the procedure is medically necessary or clinically appropriate, the following additional information will be taken into consideration, if applicable:

- Individual patient characteristics including age, comorbidities, complications, progress of treatment, psychosocial situation and home environment
- Available services in the local dental delivery system and their ability to meet the member's specific dental care needs when clinical criteria are applied

Required Documentation

The decision to provide a restorative substructure and crown for a patient should be based on a thorough clinical and radiographic examination that facilitates the formulation of an appropriate treatment plan. When the payment of benefits for a restorative substructure by a member's dental plan depends on a review of the procedure's medical necessity and clinical appropriateness, the treating practitioner should submit with the claim the following information from the patient's dental record. If the practitioner is unable to provide this information, benefit payment may be disapproved.

- Preoperative radiographic evidence should be submitted demonstrating that 50 percent or more of a tooth's original coronal structure is missing due to caries or fracture and that the tooth's periodontal, endodontic and structural condition will support the placement and maintenance of a restorative substructure and crown. Submitted radiographs must allow evaluation of the entire tooth from crown to root tip. If the need for a restorative substructure is not clearly evident through radiographic imaging, providing an intraoral photographic image of the involved tooth showing the degree of breakdown is recommended.
- Clinical documentation of the preoperative rationale for performing a restorative substructure.

When determining coverage based on medical necessity or clinical appropriateness, Delta Dental of Ohio may request other clinical information relevant to a patient's care if needed to make coverage decisions.

Additional Information

The provision of dental advice and clinical treatment of patients is the sole responsibility of treating dentists, and these clinical criteria are not intended to restrict dentists from carrying out that responsibility or recommend treatment to their patients.

Delta Dental of Ohio's clinical criteria are developed and annually updated by a panel of licensed dental general practitioners and specialists serving on Delta Dental of Ohio's Utilization Management (UM) Committee, including the Dental Director and Utilization Management Director. The criteria are developed in alignment with evidence-based clinical recommendations, guidelines and parameters of care of leading nationally recognized dental public health organizations, health research agencies and professional organizations, credible scientific evidence published in peer-reviewed medical and dental literature, the curriculum of accredited dental schools, the regulatory status of relevant dental technologies, the rules and requirements of the Centers for Medicare and Medicaid Services, Delta Dental of Ohio national processing policies and input from practicing dentists. New and revised clinical criteria must be approved by the Dental Director and adopted by the UM Committee prior to release.

Federal or state statutes or regulations, dental plan contract provisions, local or national claim processing policies or other mandated requirements may take precedence over these clinical criteria.

Delta Dental of Ohio reserves the right to modify or replace this document at any time as appropriate to ensure the soundness, accuracy and objectivity of Delta Dental of Ohio's clinical criteria.

Appendix A

D2950 Core buildup, including any pins when required

- Coverage is limited to permanent teeth.
- This service must be provided in preparation for or in conjunction with an adult crown procedure.
- Core buildup is limited to once per tooth per date of service.

D2951 Pin retention (per tooth in addition to restoration)

- A maximum of three pins per tooth will be reimbursed.

D2952 Cast post and core in addition to crown

- Prior authorization is required for cast post and core.
- A periapical radiograph and a panoramic film or a full mouth series of X-rays of the involved tooth/teeth must be submitted with each request to determine the overall health of the teeth and gums.
- Cast post and cores will only be authorized for properly endodontically treated permanent anterior teeth 6-11 and 22-27 that do not have sufficient tooth structure to support a crown.
- Tooth should be properly filled after completion of root canal therapy.

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- Overall health of remaining teeth and gums must have a positive long-term prognosis, and be free of significant risk factors leading to worsening of disease or continuing breakdown of oral condition.

D2954 Prefabricated post and core in addition to crown

- Prior authorization is required for prefabricated post and core.
- A periapical radiograph and a panoramic film or a full mouth series of X-rays of the involved tooth/teeth must be submitted with each request to determine the overall health of the teeth and gums.
- Prefabricated post and cores will only be authorized for properly endodontically treated permanent anterior teeth 6-11 and 22-27 that do not have sufficient tooth structure to support a crown.
- Tooth should be properly filled after completion of root canal therapy.
- Overall health of remaining teeth and gums must have a positive long-term prognosis, and be free of significant risk factors leading to worsening of disease or continuing breakdown of oral condition.

References

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