Delta Dental of Michigan Clinical Criteria for Utilization Management Decisions				
Reference Number: 282.27	Title: Clinical Criteria for Space Maintenance			
Issue Date (Effective Date): 12/1/2024			Last Revised Date: N/A (Initial Version)	UM Committee Approval Date: TBD/2024

#### Introduction

This Delta Dental of Michigan (Delta Dental) clinical criteria document addresses space maintainer procedures. The purpose of this document is to provide written clinical criteria to ensure that Delta Dental consistently applies sound and objective clinical evidence when determining the medical necessity and clinical appropriateness of space maintenance treatment, as well as taking individual patient circumstances and the local delivery system into account.

The premature loss of primary teeth can cause the undesirable movement of teeth, lead to reduced arch length, jeopardize the eruption of permanent teeth and create or worsen malocclusion. When properly used, space maintenance procedures can preserve spaces created by lost primary teeth and allow for proper permanent tooth eruption. Space maintenance treatment is performed mainly in response to the loss of primary molars, since the risk of space loss following the premature loss of primary anterior teeth is usually low.

The American Academy of Pediatric Dentistry's best practice guidelines on Management of the Developing Dentition and Occlusion in Pediatric Dentistry (AAPD, 2024) define space maintainers as passive appliances that "prevent loss of arch length, width, and perimeter by maintaining the relative position of the existing dentition." Space maintainers are selected for individual patients based on the tooth or teeth prematurely lost, the arch space to be maintained and other patient circumstances:

- Fixed unilateral space maintainers: This type of fixed space maintainer is utilized to prevent unilateral space loss in a
  single quadrant and is commonly placed where a single primary molar has been lost. This category includes band
  and loop appliances cemented to an abutment tooth, crown and loop appliances that involve a wire loop to hold
  space attached to a stainless steel crown and the distal shoe appliance to hold space for an unerupted first
  permanent molar when a second primary molar is lost.
- Fixed bilateral space maintainers: This type of fixed space maintainer is typically utilized for bilateral loss of primary teeth in both quadrants of the maxillary or mandibular arch. This category includes the lower lingual holding arch and the maxillary Nance and transpalatal arch appliances. Two fixed unilateral appliances may be used in place of a fixed bilateral space maintainer.
- Removable unilateral and bilateral space maintainers: This type of removable space maintainer is typically utilized
  for multiple primary teeth lost when there is no good option for placement of a fixed appliance. Obtaining required
  patient cooperation to ensure the effectiveness of space maintenance may present a challenge with this type of
  appliance.

Space maintainers may be performed by general dentists, pediatric dentists and other dental 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 space maintainer procedures. 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

This document contains confidential and proprietary information of Delta Dental of Michigan and may not be copied, distributed, republished, licensed, uploaded, posted, or transmitted in any way, without our prior written consent.

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 space maintainers are a covered benefit 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		
D1510	space maintainer - fixed, unilateral – per quadrant		
D1516	space maintainer - fixed - bilateral, maxillary		
D1517	space maintainer - fixed - bilateral, mandibular		
D1520	space maintainer - removable, unilateral - per quadrant		
D1526	space maintainer - removable - bilateral, maxillary		
D1527	space maintainer - removable - bilateral, mandibular		
D1551	re-cement or re-bond bilateral space maintainer - maxillary		
D1552	re-cement or re-bond bilateral space maintainer - mandibular		
D1553	re-cement or re-bond unilateral space maintainer - per quadrant		
D1556	removal of fixed unilateral space maintainer - per quadrant		
D1557	removal of fixed bilateral space maintainer - maxillary		
D1558	removal of fixed bilateral space maintainer - mandibular		
D1575	distal shoe space maintainer - fixed, unilateral - per quadrant		

CDT® is a registered trademark of the American Dental Association. The Association is the exclusive copyright owner of CDT, the Code on Dental Procedures and Nomenclature and the ADA Dental Claim Form.

# Clinical Criteria<sup>1</sup>

When approval of benefit payment for a space maintainer by a member's dental plan requires a determination by Delta Dental 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 space maintainer:

• Premature loss of a primary tooth due to dental caries, ectopic eruption, accident or other condition where there is a need and opportunity to prevent space loss

For patients who do not meet the published qualifying criteria for space maintainer placement, Delta Dental will consider documentation from relevant clinicians that explains the necessity of covering a space maintainer procedure for conditions not included in the criteria.

Depending on the clinical circumstances, the placement of a space maintainer 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:

- No evidence of a prematurely lost primary tooth
- Permanent tooth eruption is imminent following primary tooth loss
- The existing space does not require placement of a space maintainer
- Space loss already exists following primary tooth loss requiring consideration of immediate or future active treatment to regain space

This document contains confidential and proprietary information of Delta Dental of Michigan and may not be copied, distributed, republished, licensed, uploaded, posted, or transmitted in any way, without our prior written consent.

<sup>&</sup>lt;sup>1</sup> 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.

- Loss of a primary incisor except those lost before primary canine eruption or when there is anterior crowding
- A tooth planned as an abutment for a space maintainer has a poor structural, endodontic or periodontal prognosis
- Soft tissue impingement by a space maintainer
- Obstruction of permanent tooth eruption by a space maintainer
- Failure of a space maintainer to adequately span an edentulous space
- The use of a space maintainer is inadvisable due to the patient's oral hygiene, oral habits or inability to cooperate with treatment
- A patient has completed orthodontic treatment where retention is considered part of comprehensive orthodontic services

Depending on an individual patient's condition and circumstances, the following additional criteria for space maintainer placement may be applied for coverage determinations:

- The American Academy of Pediatric Dentistry best practice guidelines on managing the developing dentition and occlusion enumerates the factors that practitioners should consider when primary teeth are prematurely lost, including:
  - The specific tooth or teeth lost
  - The time elapsed since tooth loss
  - An assessment of the patient's tooth spacing and occlusion
  - The patient's dental age
  - The presence and root development of permanent tooth successor(s) and amount of alveolar bone coverage
  - The patient's health history, medical status, oral hygiene, oral habits and ability to cooperate with treatment
- A distal shoe space maintainer is covered only for holding space for a second primary molar lost prior to eruption of the associated first permanent molar
- After placement, space maintainers must be monitored over time to evaluate the condition of space maintainer abutment teeth, the effectiveness of the appliance and the status of the development of associated permanent teeth and periodontium
- When dental benefit programs have established program-specific criteria that define when a space maintainer is
  considered medically necessary and eligible for benefit coverage, Delta Dental will apply that criteria when there is a
  need to evaluate space maintainer treatment for medical necessity.

## **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 place a space maintainer 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 space maintainer 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 as applicable from the patient's dental record. If the practitioner is unable to provide this information, benefit payment may be disapproved.

- Diagnostic quality radiographs must be submitted showing any area of tooth loss where a space maintainer is
  planned and that allow for evaluation of the status of underlying permanent teeth and any supporting abutment
  teeth
- Documentation consistent with the patient record that explains the diagnostic rationale for placing a space maintainer, including any supporting information from the patient's dental and medical histories

When determining coverage based on medical necessity or clinical appropriateness, Delta Dental 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's clinical criteria are developed and annually updated by a panel of licensed dental general practitioners and specialists serving on Delta Dental'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 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 reserves the right to modify or replace this document at any time as appropriate to ensure the soundness, accuracy and objectivity of Delta Dental's clinical criteria.

### References

American Academy of Pediatric Dentistry. Management of the developing dentition and occlusion in pediatric dentistry. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2024-2025:P. TBD.

American Dental Association, CDT 2025: Current Dental Terminology. American Dental Association, Chicago, IL, 2024.

Holan G, Needleman HL. Premature loss of primary anterior teeth due to trauma--potential short- and long-term sequelae. Dent Traumatol. 2014 Apr;30(2):100-6.

Nowak A, Christensen JR, Mabry TR, Townsend JA, Wells, MH. Pediatric Dentistry: Infancy Through Adolescence. 6th ed. Elsevier; 2019.

Tunison W, et al. Dental arch space changes following premature loss of primary first molars: a systematic review. Pediatr Dent. 2008 Jul-Aug;30(4):297-302.

This document contains confidential and proprietary information of Delta Dental of Michigan and may not be copied, distributed, republished, licensed, uploaded, posted, or transmitted in any way, without our prior written consent.