



# Dental Clinical Policy

**Subject:** Bone Grafts for Surgical Services (Periodontal)

**Guideline #:** 04-201

**Status:** Revised

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## Description

This document addresses the clinical appropriateness for bone grafting and the type of grafting materials used with periodontal procedures and addresses the use of bone graft substitutes for all dental indications and procedures.

The plan performs review of bone grafts for surgical services (periodontal) 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.

## Clinical Indications

Bone grafts may be appropriate when replacing missing bone of the maxilla or mandible as a result of periodontal disease.

Dental review as it applies to accepted standards of care means dental services that a Dentist, exercising prudent clinical judgment, provides to a patient for the purpose of evaluating, diagnosing or treating a dental injury or disease or its symptoms, and that are: in accordance with the generally accepted standards of dental practice; in terms of type, frequency and extent and is considered effective for the patient's dental injury or disease; and is not primarily performed for the convenience of the patient or Dentist, is not cosmetic and is not more costly than an alternative service.

For dental purposes, "generally accepted standards of dental practice" means:

- Standards that are based on credible scientific evidence published in peer-reviewed, dental literature generally recognized by the practicing dental community
- specialty society recommendations/criteria
- the views of recognized dentists practicing in the relevant clinical area
- any other relevant factors from credible sources

## Criteria

Requests for bone grafting procedures may be reviewed for appropriateness by dental professional. Submitting dentists must include any and all clinical information related to the procedural request including, but not limited to, recent, dated radiographic images, a letter of rationale explaining the necessity of the bone graft and whether related to another service, a recent patient health history, and a recent dated periodontal chart that is less than 12 months old and follows acceptable reporting guidelines by the ADA.

When the primary procedure is not a covered service, all related adjunctive procedures, including but not limited to, bone grafts and use of membranes even though covered by the plan for other services is not a covered benefit as it is related to a non-covered service.

1. Bone graft replacement should generally be confined to vertical, multi-walled or narrow defects with areas of horizontal bone loss or class II furcation (loss of bone between the roots typically of molar teeth) defects.
2. It has been reported that broad horizontal interproximal defects do not respond well to bone graft procedures.
3. Bone graft procedures are generally limited to treatment of periodontal/peri-implant defects (dependent upon group contract).
4. Bone graft procedures associated with endodontic therapies or with minor periradicular surgery may not be benefitted as typically bone heals by secondary intention.
5. Documentation of the necessity of bone grafting for periodontal/peri-implant services must include all associated, diagnostic quality, recently dated (within 12 months), properly oriented, and labeled pretreatment radiographic images demonstrating vertical bone defects.
6. Current (within 12 months), dated, post initial therapy periodontal charting (6 point periodontal) indicating minimum pocket depth of 5mm is required.
7. The use of biologic materials for soft or osseous tissue regeneration may not be benefitted in conjunction with bone grafts (group contract dependent).
8. Bone graft procedures include post-operative management for the immediate three months following surgery as well as for any surgical re-entry for three years (group contract dependent).
9. Updated
10. Bone grafts are not considered for benefits when performed in conjunction with soft tissue grafting procedures.
11. Routinely placing bone grafts into extraction sites may not be necessary for complete and adequate healing.
12. Current, dated cone-beam computed tomography (CBCT); photos, narrative and chart notes may be considered for benefit determination.

## Coding

<b>CDT</b>	<i>including but not limited to:</i>
D4263	Bone replacement graft – retained natural tooth- first site in quadrant
D4264	Bone replacement graft – retained natural tooth- each additional site in quadrant

D4265	Biologic materials to aid in soft and osseous tissue regeneration, per site
D4266	Guided tissue regeneration – resorbable barrier, per site
D4267	Guided tissue regeneration – non-resorbable barrier, per site
D4286	Removal of non-resorbable barrier
D6103	Bone graft for repair of peri-implant defect – does not include flap entry and closure
D6104	Bone graft at time of implant placement
D7295	Harvest of bone for use in autogenous grafting procedure

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

<b>References</b>
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**Peer Reviewed Publications:**

1. Bowers GM, Chadroff B, et al. Histologic evaluation of new attachment apparatus formation in humans. Part III. J Perio 1989; 60:683-693.
2. Hamilton D. On sponge grafting. Journal of Anatomical Physiology 1881; 27:385-414.
3. Laurell L, Gottlow J, et al. Treatment of intrabony defects by different surgical procedures. A literature review. J Perio 1998; 69:303-313.
4. McAllister BS and Haghghat K. Bone augmentation techniques. AAP-commissioned review. J Perio 2007; 78:377-396.
5. Garrett S. Periodontal regeneration around natural teeth. Annals Perio 1996; 1:621-666.
6. CDT 2023 Current Dental Terminology, American Dental Association.
7. Reynolds MA, Aichelman-Reidy ME, et al. The efficiency of bone replacement grafts in the treatment of periodontal osseous defects. A systematic review. Annals Perio 2003; 8:227-265.
8. Brunsvold MA and Mellonig JT. Bone grafts and periodontal regeneration. Periodontal 2000; 1:80-91.
9. Bowers GM, Chadroff B, et al. Histologic evaluation of new attachment apparatus formation in humans. Part I. J Perio 1989; 60:664-674.

<b>History</b>				
Revision History	Version	Date	Nature of Change	SME
	initial	2/8/17	creation	L Rosen
	Revision	2/6/18	Related policies, Appropriateness/Medical Necessity	M Kahn
	Corrected	5/7/20	Corrected criteria	Rosen
	Revision	6/3/20	Annual Revision	Committee
	Revised	12/4/2020	Annual Revision	Committee
	Revised	10/15/2021	Annual Revision	Committee
	Revised	10/24/2022	Annual Revision	Committee

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