



Coding Bone Grafts

I. INTRODUCTION

Proper coding provides a uniform language to describe medical, surgical and dental services. Diagnostic and procedure codes are continually updated or revised. Familiarity and compliance with coding guidelines – specifically, ICD-10-CM, CPT, HCPCS and CDT – are necessary to use these codes successfully.

II. HARVESTED VS. SYNTHETIC BONE GRAFT DEFINITIONS

Harvested Graft

Allograft: Tissue removed from a person to be received by another.

Autograft: Tissue removed from a donor site of a person to be placed in another site of the same person.

Note: When the surgeon performing a reconstructive procedure does not harvest the bone, the procedure code should be reduced with modifier –52 (reduced service).

Synthetic Graft

A synthetic graft is a man-made material used for reconstruction procedures in lieu of bone. Synthetic grafting material is bio-compatible and made mostly from proteins naturally found in the body. This is a reliable alternative to harvesting bone from a donor site.

Note: When synthetic material is used, assign the appropriate reconstructive procedure and reduce it with modifier –52. The reduction is necessary as harvesting of the bone was not performed.

Autogenous vs. Non-autogenous

An autogenous bone graft uses bone tissue harvested and then transplanted into a recipient site within the same individual. A non-autogenous bone graft uses tissue received from a donor other than the patient. Generally, the harvesting of autogenous bone tissue and its utilization are performed during the same surgical episode. As such,

the autogenous bone graft consists of living bone tissue transplanted into the site and contains viable bone cells, bone progenitor cells and bone regenerative growth factors.

Autogenous bone grafts may be performed to reconstruct or preserve normal bony architecture. Some procedures and conditions requiring autogenous bone grafting include:

- Primary or secondary reconstruction of osseous defects of the jaws and/or facial bones resulting from traumatic, developmental or pathologic processes or their treatment.
- Orthognathic and jaw or facial reconstruction procedures.
- Reconstruction of osseous bone defects resulting from periodontal disease and bone loss.
- Reconstruction of alveolar bone loss of the jaws due to atrophy of the alveolar bone or sinus pneumatization.

III. CPT CODING

The following are two CPT codes most frequently used by an OMS for bone grafting:

- 21210 Graft, bone; nasal, maxillary or malar areas (includes obtaining graft)
- 21215 Graft, bone; mandible (includes obtaining graft).

Note: Modifier –52 (reduced services) is used when the surgeon is not harvesting the graft.

A sinus lift is essentially a bone graft to the maxilla. As such, this procedure may be reported to a medical carrier by reporting CPT code 21210. When utilizing freeze-dried synthetic bone materials (non-autogenous bone materials only) without surgical bone graft harvesting, modifier –52 should be appended to code 21210 with a corresponding appropriate reduction in the fee. The reduced modifier is necessary as harvesting of the bone was not performed. The material cost of the freeze-dried or synthetic bone, if supplied by the surgeon, may be reported by utilizing CPT code 99070 (*supplies and materials [except spectacles]*) provided by the physician over and above those usually

included with the office visit or other services rendered (list drugs, trays, supplies or materials provided) along with an invoice to account for the additional supply cost.

CPT codes 20900 *Bone graft, any donor area; minor or small (e.g., dowel or button)* and 20902 *Bone graft, any donor area; major or large* represent graft harvesting and should not be reported in conjunction with codes 21210 or 21215 because these codes already include obtaining the graft. According to CPT guidelines, 20900 and 20902 are used for obtaining autogenous bone or other tissues through a separate skin incision, but only when the harvest of the graft material is not included in the code or descriptor for the primary surgical service. CPT Codes 20900 and 20902 also may be used to report a single tooth alveolar reconstruction when performed in areas of missing teeth to rebuild the alveolus. An example of the use of 20900 or 20902 may be with a reconstructive procedure, such as 21196 *Reconstruction of mandibular rami and/or body, sagittal split; with internal rigid fixation*. This code does not indicate that obtaining the graft is included; therefore, if the OMS is harvesting the material through a separate incision (e.g., from the hip), it may be appropriate to separately report the bone harvest.

There may be instances in which two surgeons are required to perform a specific procedure. For example, when an OMS and another physician both act as primary surgeons performing distinct aspects of the same procedure. When this is the case, each surgeon would report the same CPT code, append modifier –62 (Two Surgeons) and report the service(s) on separate claims to indicate their co-surgeon status.

Note that not all surgical CPT codes may be eligible for co-surgeon billing. The Medicare [Physician Fee Schedule Look-Up Tool](#) is a helpful resource for determining the services for which two surgeons may be paid under Medicare rules. Many commercial carriers follow CMS rules, therefore, it is important to confirm reporting and reimbursement guidelines with each payer prior to claim submission.

If utilizing non-autogenous materials on the medical side, some carriers may allow separate reporting with supply code 99070. An invoice should accompany the claim, although some payers still may consider this part of the global fee.

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IV. CDT CODING

To better understand when to use the appropriate CDT code(s) for bone grafting, consider the following factors:

- Is a tooth or an implant being removed?
- Is an implant being placed at the time of the bone graft?
- Is the site an edentulous ridge that is being augmented prior to placing an implant at a future date?
- Is there an integrated implant at the site with a bony defect?
- Is the bone grafting being performed for the reconstruction of surgical, traumatic or congenital defects?

Proper code reporting

D6103 *bone graft for repair of peri-implant defect* should be used when an existing implant is present and there is a bony defect that requires bone grafting.

D6104 *bone graft at the time of implant placement – per site* should be reported when a bone graft is reported at the same time of the implant placement (e.g., if a tooth is extracted, an implant is placed and a bone graft is placed to graft the gaps between the implant and the extraction socket or an implant is placed in a healed ridge and bone is augmented around the implant). This code should not be used if an implant was not placed on the same day as the graft.

D7295 *harvest of bone for use in autogenous bone grafting procedure* is appropriately used to code for the actual procedure of procuring the autogenous bone graft. Included in this procedure would be the sterile/aseptic preparation of the donor site, administration of local anesthesia as needed, incisions required to access the native bone for harvest, the actual harvest of the native bone for implantation, treatment of the donor site after removal of the autogenous bone graft for hemostasis and closure of the donor site. This code is reported in addition to those autogenous graft placement procedures that do not

include harvesting of bone. **Therefore, it is inappropriate to code for this procedure if the harvest of the graft is already included in the description of the graft being performed.**

Note: Although the technology exists, it is an infrequent event to bank or store an autogenous graft for future implantation into the same individual.

D7950 *osseous, osteoperiosteal or cartilage graft of the mandible or maxilla-autogenous or non-autogenous, by report* is reported per arch and may be used when a bone graft is placed for augmentation of an alveolar ridge for future implant placement. In cases where a block graft is used to augment the ridge for dental implants, D7950 may be reported. If using a membrane in conjunction with the bone graft/block graft procedure, you also may report this service separately based on the type of membrane used (resorbable or nonresorbable). This code should not be used if an extraction or implant was removed at the site on the same day nor should it be used at the time of implant placement. The code descriptor for D7950 indicates, “by report,” therefore documentation describing the procedure should be included when submitting a claim.

D7951 *sinus augmentation with bone or bone substitutes via a lateral open approach* is reported when the augmentation of the sinus cavity to increase alveolar height for reconstruction of edentulous portions of the maxilla. This procedure is performed via a lateral open approach. This includes obtaining the bone or bone substitutes. Placement of a barrier membrane, if used, should be reported separately.

D7952 *sinus augmentation via vertical approach* is the augmentation of the sinus cavity to increase alveolar height by vertical access through the ridge crest by raising the floor of the sinus and grafting as necessary. This code includes obtaining the bone or bone substitutes.

According to the AAOMS Committee on Healthcare Policy, Coding and Reimbursement, D7951 **may be** crosswalked to CPT code 21210 in certain circumstances when describing an extensive procedure. However, D7952 is not an appropriate crosswalk based on the level of reconstruction not being equal to the intensity described in CPT code 21210.

D7953 *bone replacement graft for ridge preservation – per site* should be used when a bone graft is placed in the site where a tooth is extracted or an implant is removed. This should not be used if an implant is placed at the time of extraction.



D7955 *repair of maxillofacial soft and/or hard tissue defect* is appropriately reported for instances involving reconstruction of the jaws due to trauma or surgical correction of congenital defects. This code may be reported in cases where the bone graft is performed for reasons other than prosthetic reconstruction.

The following procedures commonly performed with bone grafting procedures are not included in the description of the bone graft CDT codes. As such, these codes may be reported separately:

D4265 biological materials to aid in soft and osseous tissue regeneration, per site

Note: When biological materials are mixed with bone graft materials (e.g., Gem 21 or Emdogain), code D4265 may be used in addition to the bone grafting CDT codes.

D4266 guided tissue regeneration, natural teeth – resorbable barrier, per site

D4267 guided tissue regeneration, natural teeth – non-resorbable barrier, per site

D4286 removable of non-resorbable barrier

D6106 guided tissue regeneration – resorbable barrier, per implant

D6107 guided tissue regeneration – non-resorbable barrier, per implant

D7956 guided tissue regeneration, edentulous area – resorbable barrier, per site

D7957 guided tissue regeneration, edentulous area – non-resorbable barrier, per site

In cases where PRP, PRGF, PRF or any other product when blood concentrate is collected and applied, code D7921 (collection and application of autologous blood concentrate product) should be used in addition to the bone grafting CDT codes.

V. Caution with Crosswalks

It is important to note Medicare Administrative Contractors (MACs) have recently indicated a claims audit detected medical claims submitted by dental providers,

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including OMSs, for bone grafts associated with implants and extractions, which are services statutorily excluded by Medicare. It was further noted that documentation demonstrated that synthetic bone materials were used rather than harvested bone as described by many bone graft codes. It is believed that many providers crosswalk CDT D7950 or D7953 to either CPT 21210 or 21215 when submitting a medical claim, which is not an appropriate crosswalk. Inappropriate coding can lead to overutilization of CPT codes with high RVUs and the potential to be flagged for fraudulent coding practices (e.g., upcoding) resulting in recoupment of payment.

CPT codes 21210 and 21215 are commonly performed in concert with autogenous bone harvest from the anterior or posterior iliac crest and should be not utilized to report socket preservation or simple bone grafts, as these procedures are based on the intensity of the procedure, degree of reconstruction and are more extensive in nature. The AAOMS Committee on Healthcare Policy, Coding and Reimbursement emphasizes the use of clinical discretion when crosswalking grafting codes from CDT to CPT. In cases of minor reconstructions, the CDT code itself would be more appropriate to report for both dental and medical carriers. Given the increased financial scrutiny across the health sector, it is imperative for OMSs and their staff to employ best coding practices and to be cognizant of the consequences for not doing so. As such, D7950 should be crosswalked with caution.

Additionally, CPT codes 21210 and 21215 would be more appropriate crosswalks for CDT D7955, as they are typically reported for cases involving reconstruction of the jaws due to trauma or surgical correction of the congenital defects rather than in the case of prosthetic restoration. For instance, when an OMS performs trauma reconstruction where the primary procedure does not inherently involve bone grafting – such as during a sagittal split – CPT codes 21210 and 21215 may be reported in conjunction with the primary procedure, provided that bone grafting is not already included as part of that surgical service.

In cases when reporting CPT codes 21210 and 21215 are deemed appropriate, append modifier –52 if non-autogenous graft material is used.

Note: The list of CDT and CPT codes in this coding paper is not all-inclusive. AAOMS recommends reporting codes applicable to the service(s) rendered and the patient's specific clinical condition as determined by the provider.

This paper should not be used as the sole reference in coding. Both diagnosis and treatment codes change frequently, and insurance carriers may differ in their interpretations of the codes.

Coding and billing decisions are personal choices to be made by individual oral and maxillofacial surgeons exercising their own professional judgment in each situation. The information provided in this paper is intended for educational purposes only. In no event shall AAOMS be liable for any decision made or action taken or not taken by anyone in reliance on the information contained in this article. For practice, financial, accounting, legal or other professional advice, professional advisers should be consulted.

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This is one in a series of AAOMS papers designed to provide information on coding for oral and maxillofacial surgery. When indicated, reference the appropriate area of the coding books where the principles of coding illustrated in this paper may be applied.

Proper coding provides a uniform language to describe medical, surgical and dental services. Diagnostic and procedure codes are regularly updated or revised. The AAOMS Committee on Healthcare Policy, Coding and Reimbursement has developed these coding guidelines to assist the membership in using the coding systems effectively and efficiently.

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