

RECOMMENDED CLINICAL CRITERIA FOR DENTAL IMPLANTS FOR THE DEPARTMENT OF HEALTH CARE FINANCE, DISTRICT OF COLUMBIA

DESCRIPTION:

Dental implants are an accepted method for tooth replacement. The therapeutic goal of dental implants is to support restorations that replace a missing tooth or teeth to provide the member comfort and function and to assist in the ongoing maintenance of the remaining intraoral and perioral structures.

The first dental implant was a titanium implant in a human volunteer in Sweden by Dr. Per-Ingvar Branemark, a Swedish Orthopedic Surgeon in 1965.

There are three types of dental implants, the endosseous, subperiosteal and transosteal. Dental Implants can be performed as delayed procedures (over months or years) or immediate (at the time of tooth extraction).

An abutment is a connection to a dental implant that is a manufactured component usually made of machined high noble metal, titanium, titanium alloy or ceramic. A custom abutment is fabricated for a specific member using a casting process and usually is made of noble or high noble metal.

Surgical stents are highly recommended for more accurate placement of dental implants.

Factors influencing the selection of /patients for dental implants include age, general and dental health, and individuals with special needs.

They must be 18 years old and not pregnant.

IMPLANTS AND IMPLANT SUPPORTED PROSTHETICS

Implants: (Implant Readiness)

- A. Before requesting implants, periodontal health, and dental health (endodontic, extractions, crowns, and fillings) must be completed. Pre-screening and determining eligibility for the implants using periodontal charting, x-rays and a narrative stating why this procedure is necessary.
- B. All extraction sites for implants must be healed and radiopaque.
- C. Additional requires for the Implant Site:

1. Bone grafting: Code D7953 Bone Replacement Graft/ridge preservation is allowed to restore bone height for extraction sites that are candidates for implant placement.
2. The implant site - no ridge augmentation is needed.
3. Bone grafting at the time of implant placement is not recognized because the implant site should be ready/healing of the bone.

D. Second molar implants will be determined by the review of the clinical narrative and supporting documentation for the request.

E. CT scan (D0365/66/67) would be allowed to assist the provider in the evaluation of the implant site and placement.

- I. Single dental implants are **medically appropriate** when a functional deficit exists.
- II. Dental implant bodies are **medically appropriate** to anchor a removable denture, not a fixed prosthesis, if the traditional removable dentures cannot be worn or are painful.

Coverage is limited to four upper dental implant bodies in the maxilla or two lower dental implant bodies in the mandible for the edentulous patient.

- III. Dental implants are **not medically appropriate** in the following situations:
 - Presence of local or systemic conditions that may interfere with the normal healing process and subsequent tissue homeostasis.
 - Inadequate quality or quantity of alveolar bone and soft tissues.
 - The patient currently has active periodontal disease and poor hygiene.
 - Replacement of a second molar if used to extend the functional first molar occlusion unless the patient has an Orthodontic problem.
 - Replacement of wisdom teeth (1, 16,17 and 32).
 - When maintenance of the tooth/teeth is/are not considered. By this, it is meant that placement of dental implants in an area which is not truly of functional benefit to the patient or in an arch which should be edentulated altogether should not be covered. In this case, it will be up to the Qualis dental reviewer to determine if the patient can reasonably and successfully (or at least adequately) function with non-implant-borne dentures.

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- When the teeth are not in occlusion (meeting of the upper and lower teeth when the jaw is closed, and the tooth/teeth surfaces come in contact). There is the possibility that the dental implant would be placed in a site unopposed (i.e. not in occlusion) with *natural* dentition but would be functioning against a *denture tooth* in the opposing arch.

IV. Four (4) dental implants per arch will be authorized for the partially edentulous patient; for the completely edentulous, four (4) in the maxilla and two (2) in the mandibular area.

When more than four (4) teeth are missing in the same arch bilaterally, consideration must be given to a removable partial denture as an alternative benefit.

V. There must be at least 3 mm of inter-dental space between dental implants and naturally existing teeth to maintain periodontal health and form.

VI. If stents are required for dental implant placement, one stent per arch will be allowed.

VII. Dental implants will be re-evaluated via intraoral radiographs or CT scans **prior** to the authorization of abutments or crowns four to six months after dental implant placement.

VIII. After abutments or crowns are seated, a final intraoral radiograph or CT scan must be reviewed by Qualis Health dental reviewers before any further services in that area can be authorized.

IX. If an anterior tooth has been extracted due to trauma, gross caries or endodontic failure, with good general and periodontal health and controllable risk factors, an anterior dental implant is justified and will be authorized.

X11. If bone grafting and augmentation is necessary, there must be a 4-6 months interval with good quality/contrast X-Rays or CT Scan for review by Comagine Health dental reviewers.

Other considerations for these Guidelines would include the following:

Age and general health

- The patient must be 18 years old and not pregnant.
- The patient must be generally fit and healthy and should not be:
 - undergoing treatment including but not limited to long-term steroid therapy, radiation therapy to a potential implant site, chemotherapy, hemodialysis, heart surgery (within the last six months), recent Myocardial Infarction, (within past 6 months) or hyperbaric oxygen treatment for osteoradionecrosis.
 - Taking anticoagulants or medications that contraindicates implant success, such as bisphosphonates.
 - An illicit drug user (eg. Crack, methamphetamine, heroin, cocaine, or other drugs that can be smoked and/or applied to the intraoral tissues).
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- The patient must not be suffering from metabolic disorders, chronic renal disease, or a severe systemic disease (including but not limited to leukemia and collagen disorders such as systemic lupus erythematosus and scleroderma).
- There must not be active, unstable psychiatric illness or any chronic illness that has not been demonstrated to be well controlled and stable.

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- If the patient has insulin-dependent or non-insulin dependent diabetes, their HbA1c must have in the 6-7% range over the last 6-12 months, and there must be evidence of appropriate prophylactic antibiotics administered. Diabetic patients have been shown to be at greater risk for developing peri-implant disease.
- Cigarette smokers are at increased risk for dental implant failure. There must be documentation of cessation of smoking during the pre-implant and implant period.
- In instances of trauma or cancer involving the maxillofacial structures, a coordinated Team approach involving an Anesthesiologist, a Head and Neck Cancer Specialist, an Oral Surgeon and a General Dentist must be involved.
- The patient must not have uncontrolled bulimia, untreated GERD, or other conditions with significant acid reflux.
- The patient should not have intra- and perioral piercings which can destroy natural dentition.

Dental health and history

- The patient must have generally healthy, well maintained, and stable dentition.
- Documentation provided should show absence of radiographic and clinical calculus, a full-mouth periodontal charting, and an adult oral prophylaxis procedure, the date not to exceed 6 months prior to request for implant restoration.
- Initial documentation should clearly indicate any areas of current facial anesthesia, paresthesia, or dysesthesia as might be encountered in a patient with a past history of trauma, oral-maxillofacial surgical procedures, tumors, anatomical anomalies, etc.

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- Tooth (teeth) to be replaced must have an opposing occlusion
- The patient must have no dental habits or oral conditions that preclude the placement of implants, including but not limited to:
 - bruxism, craze lines,
 - severe ulceration or erosive lesions,
 - temporomandibular joint disorder or myofascial pain disorder,
 - history of facial fractures (which may preclude the placement of implants; however this will be considered on a case by case situation).
- The patient should have no history of dental implant failure or intraoral bone graft failure.

The patient must be able to cope with the process of implant treatment and must be capable of looking after their implant(s) and restoration(s) satisfactorily.

INDUSTRY STANDARDS ALLOWS THE REPLACEMENT OF DENTAL IMPLANTS ONCE EVERY FIVE (5) YEARS IF NEEDED. (**)

The teeth remaining in either arch after completion of the dental treatment plan in preparation for dental implants must be in such a condition that they will remain intact for a similar expected life of an implant.

An overall treatment plan MUST include documentation of the absence/contra-indication of the above conditions, identification of the Dentist performing the dental implant procedures and the General Dentist who will follow up with the patient, pre and post operatively, and will restore the dental implant.

Appropriate pre-implant documentation, e.g., periodontal charting, probing, MUST be provided by either source.

SUMMARY

Based on the assessment of peer-review literature, Qualis Health recommends the following Clinical Guidelines for Dental Implants:

1. Candidates for implants must be age 18 or older and not pregnant.

2. Stable periodontal health and overall dental health in the entire mouth must be demonstrated.
3. Documentation submitted must demonstrate absence of radiographic and clinical calculus, pre-and post-periodontal charting and treatment, and an adult prophylactic/preventive procedure date not to exceed 6 months prior to the request for implant restoration.
4. Tooth (teeth) to be replaced must have an opposing occlusion.
5. Authorization to replace wisdom teeth (1,16,17 and 32) will not be approved.
6. Dental implants that fail will not be replaced. (**).
7. Four (4) implants per arch will be authorized for the partially edentulous patient, and for the completely edentulous, four (4) in the maxilla and two (2) in the mandibular.
8. There must be at least 3 mm of inter-dental space between implants and naturally existing teeth.
9. If stents are required for dental implant placement, one stent per arch will be allowed.
10. Dental implants will be re-evaluated with X-rays and or CT scans prior to the authorization for the of abutments or crowns after 4-6 months.
11. If bone graft augmentation is necessary, there must be a 6-month interval before a dental implant can be placed and good quality/contrast x-rays or CT scans must be submitted for review.
12. The optimal dimensions of available alveolar bone for most forms of implant placement are: 5mm in width, 13-15 mm in height and 5 mm in length.
13. All requests for dental implants will be reviewed by dentists.

14. Other Contraindications for dental implants will include:

- a. treatment including but not limited to long-term steroid therapy, radiation therapy to a potential implant site, chemotherapy, hemodialysis, heart surgery (within the last six months), recent Myocardial Infarction, (within past 6 months) or hyperbaric oxygen treatment for osteoradionecrosis.
- b. Concomitant use of anticoagulants or medications that contraindicates implant success, such as bisphosphonates.
- c. Known illicit drug use (eg. Crack, methamphetamine, heroin, cocaine or other drugs that can be smoked and/or applied to the intraoral tissues)
- d. Uncontrolled metabolic disorders, chronic renal disease, or a severe systemic disease (including but not limited to leukemia and collagen disorders such as systemic lupus erythematosus and scleroderma).
- e. Uncontrolled bulimia, GERD, or other conditions causing acid reflux.
- f. Presence of intra- and perioral piercings.
- g. Unstable psychiatric or chronic illness as noted above included poorly controlled diabetes mellitus with a current Hemoglobin A1c(HgbA1c>7%).
- h. Any history of dental implant failure or intraoral bone graft failure

SELECTED REFERENCES:

Academy of Osseointegration. 2010 Guidelines of the Academy of Osseointegration for the provision of dental implants and associated patient care. Int J Oral Maxillofac Implants 2010 May-Jun;25(3):620-7.

*Academy of Osseointegration. Ad Hoc Committee for the Development of Dental Implant Guidelines. Guidelines for the provision of dental implants. Int J Oral Maxillofac Implants 2008 May-Jun;23(3):471-3.

American Academy of Periodontology. Position paper. Dental implants in periodontal therapy. J Periodontol 2000 Dec;71(12):1934-42

American Academy of Periodontology. Parameter on placement and management of the dental implant. J Periodontol 2000 May;71(5 Suppl):870-2.

American Dental Association. Council on Scientific Affairs. Dental endosseous implants: an update. J Am Dent Assoc 2004 Jan;135(1):92-7.

www.indiandentalacademy.com

Ferriera SO, Silva Gl. Et al., Prevalence and Risk Variables for Peri-Implant Disease in Brazilian

Subjects-Clin. Periodontol 33:929-35,2006

Mombell A, "Microbiology and Anti-Microbial Therapy of Peri-Implantitis, Periodontology

2000-2002:28: 177-189

J. Mass Soc 2010 Spring, 59(1):124

Diabetes Metab 2012, Feb. 38(1)14.9

Elsuheilu ES., Zarb ,GA; Implant Prosthodontics in Medically Challenged Patients: The University of Toronto Experience, J Canadian Dent Assoc 2002; 68(2):103.8

CA, Moy PK, The association between the failure of dental implants and cigarette smoking.

Int. J. Oral Maxillofac Implants 1993; 8:609-615

The influence of smoking on 3-year clinical screen of osseointegrated dental implants, Ann:

Periodontol, 2000 Dec;5(1):79-89.

<http://www.sfladeshare.net/indiandentalacademy/indications-contraindications-of-isp>

Albrektssont, S , State of the Art in Oral Implant. J Clin. Periodontal 1991, 18:7/481.

"approximately

18-20% of patients with a recent history or myocardial infarction (MI) will have complications of recurrent MI with a high mortality rate of 40-70%. If surgery is

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within 3 months or with risk in another MI in 30%, if within 3-6 month 15%. After 12 months the incident of recurrent MI stabilizes at about 5%. Elective procedures should be postponed for at least 12 months following an MI."¹.

Dent Clin North Am. 1998 Jan; 42(1):35

[http://www.slideshare.net/indiandentalacademy/indications-contraindications- of-isp](http://www.slideshare.net/indiandentalacademy/indications-contraindications-of-isp).

Smith, RA. Berger R., Dodson TB. Risk factors associated with dental implants in healthy and medically compromised patients. Int. J Oral Maxillofacial Implants 1992, 7:367-372.

Branemark, Per-Ingvar et.al., (1981) Tissue Integrated Prosthesis (in English), Quintessence Books, ISBN 0867151293.

Dr. G.O. Gallucci, Dept. of Rest. Dent 7 BiomedSci Harvard Sch of Dent Med, 188 Longwood Ave., Boston Mass, 02115, USA.

Schwartz-Arad, Levin Dent. Traumatology, 2004 Dec., 20 (6):344-7.

<http://chosdentimpl.com>, Nat'l J. Max-fac.surg 2010 Jan-Jun:1 (1):20-23.
www.indiandentalacademy.com

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