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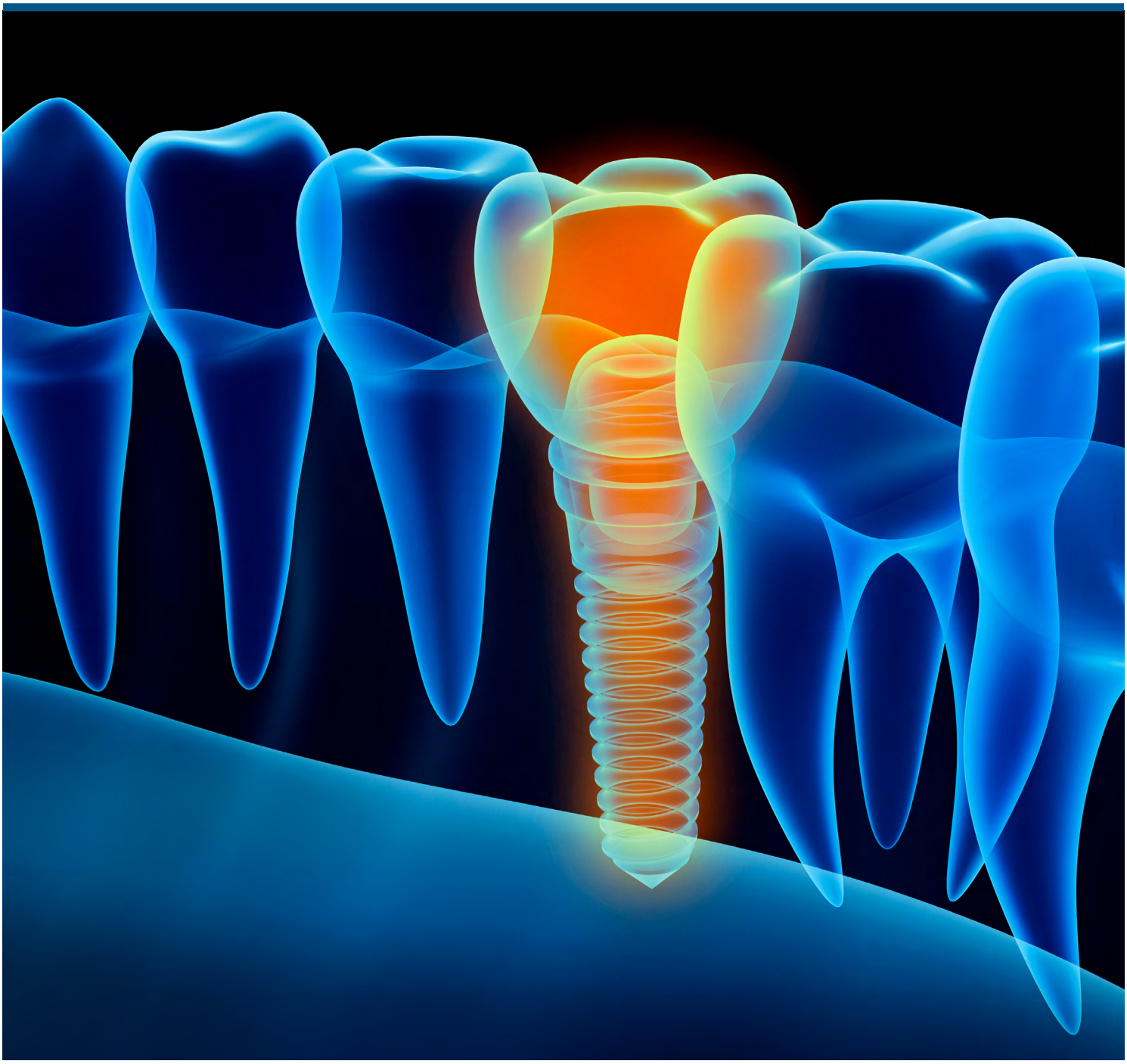
ACC Dental Implant Patient Selection Criteria

August 2021

Accident Compensation Corporation and New Zealand Dental Association



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Introduction

Welcome to this guidance for dental implants for Accident Compensation Corporation (ACC) clients. The guidance sets out the criteria that must be met for ACC to consider contributing towards the cost of dental implants. It is also an evidence- and consensus-based tool to help you to work in partnership with us to make fair and consistent decisions on necessary and appropriate treatment. ACC developed this guidance in partnership with representatives of the New Zealand Dental Association.

Scope

The scope is our agreed criteria when ACC is considering funding for dental implant therapy. Note that the process of restoration with dental implants involves two stages, the process to place the implant fixture and the restoration process (structures attached to the dental implant). This guidance refers only to the patient selection criteria for dental implants.

Working in partnership

ACC is a Crown entity that delivers New Zealand's accident insurance scheme as set out in the Accident Compensation Act 2001 (AC Act). We all have a role to play in ensuring the continued sustainability of this unique scheme and this is why our partnership with you is so important. Together, and in conjunction with other health professionals, we can help to ensure that people injured in accidents in New Zealand receive the treatment they need to get back to everyday life.

When you ask ACC for help in treating your patients, we're guided by three key elements.

1. Our governing legislation, regulations, and your responsibilities

The AC Act sets out what we're able to cover and requires us to meet specific quality standards in helping our covered injured clients. The 'Health Providers' section on our website (***www.acc.co.nz***) has more information for you about what we cover, your responsibilities, and our position statements. It also explains how we support quality and work to resolve issues.

2. Standards set by professional bodies

ACC's legislation requires dental providers to be registered with their regulatory authorities and to hold current annual practising certificates. We also expect you to comply with the professional and practice standards set down by the ***New Zealand Dental Council Standards Framework*** for Oral Health Practitioners.

3. Major health sector frameworks, such as the Health Practitioners Competence Assurance Act 2003 (HPCA Act)

The HPCA Act protects the public's health and safety by providing mechanisms to ensure that health practitioners are competent and fit to practise their profession for the duration of their professional lives. Having one legislative framework enables consistent procedures and terminology across the many professions now regulated by the Act. The HPCA Act is administered by the Ministry of Health - for more information, see the ***HPCA Act*** or the ***Ministry of Health commentary on the Act***.

Ensuring necessary and appropriate treatment

Before ACC can consider a dental implant request, your client must have an accepted claim for the specific tooth/teeth that is to be treated, and the primary need for the dental implant must be due to the covered injury and not the pre-existing condition of the tooth/teeth. There are other factors that we take into account before approving entitlement/ contribution to treatment costs to rehabilitate, and your clients should be told this. These other factors relate to ensuring our clients will receive necessary and appropriate treatment as defined by the AC Act.

You have an essential role in helping your clients to navigate their recovery from dental injury. The AC Act states ACC is liable to contribute towards treatment if it is for the purpose of restoring the client's health to the maximum extent practicable, and the treatment:

- is necessary and appropriate
- has been or will be performed only on the number of occasions necessary
- has been or will be given at an appropriate time or place
- is of a type normally provided by the treatment provider
- is provided by a treatment provider of a type who's qualified to provide that treatment and who normally provides that treatment: registered periodontists, maxillofacial surgeons, and oral surgeons
- is provided after ACC agrees to the treatment.

When deciding if we can approve a client's treatment, ACC must take into account the:

- nature and severity of the injury
- generally accepted means of treatment for such an injury in New Zealand
- other options available in New Zealand for the treatment of such an injury
- cost in New Zealand of the generally accepted means of treatment and the other options, compared with the benefit that the client is likely to receive from the treatment.

Essentially, we ask you to provide necessary and appropriate treatment that's proportional to each client's dental injury and expected recovery. If you believe a dental implant will achieve this outcome, you will find evidence-based and expert consensus on best-practice dental implant patient selection criteria in this guidance.

How the guidance was developed

The first version was developed and published in 2006 and the second in 2010.[1] ACC and NZ Dental Association (NZDA) representatives collaborated to produce this version that provides practical guidance on patient selection criteria for dental implant treatment.

ACC's Dental Advisor, Rosemary Kennedy, requested that the 2010 guideline be updated. We convened an expert advisory group (EAG) of NZDA specialists. Alongside evidence-based research[2], updated since 2010, the EAG provided expert consensus knowledge in this area. The current guidance considers the evidence, expert advice, and the ACC claims management processes. This 2021 version of the guidance will help you to make fair and consistent decisions on necessary and appropriate treatment for ACC-covered dental injury clients.

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Dental implant patient selection criteria

This guidance aims to mitigate the risk of implant failure and ensure appropriate patient selection, and to ensure functional, maintainable and predictable restorations for ACC clients to meet the requirements of the AC Act.

1. Age and general health

Your patient must be at least 21 years old and dentally mature. There is no objective diagnostic tool to confirm that a person's craniofacial growth is complete, and evidence-based literature supports this age criterion.[3]

The scientific literature confirms that some medical conditions and medications may increase the risk for the patient undergoing surgery and may lead to premature failure (loss) of the implants.

It is the surgical provider's responsibility to screen for any and all conditions that may affect the osseointegration of the dental implant, longevity of the implant and health of the patient after receiving dental implants. The patient should be fit and healthy to undergo surgical and restorative dentistry treatment over a protracted period, which may last up to 12 months. ACC can contribute towards annual follow up visits as a requirement for the lifetime of the implant. They should also have the capacity to understand the proposed treatment option, give informed consent, and comply with a protracted and complex treatment plan, daily dental homecare and regular dental attendances.

2. Medical conditions

There are some medical conditions that may indicate a patient is not an appropriate candidate for dental implant treatment. These medical conditions are outlined below. If your client has any of these conditions, medical approval from your client's treating physician must be provided with the implant prior approval request.

MEDICAL CONDITION	RATIONALE
Patients who were treated with radiation therapy for the oro-facial region.	Patients who have received a more than (>50 Gy) radiation therapy to a potential implant site are at risk of developing osteoradionecrosis of the surgery site of the jaw bones and are at risk of failing implants. In those who had undergone radiotherapy to the oro-facial region, a radiation dose report/chart is required to access the dose of the radiation received at the proposed sites. If implant treatment is still going to be considered, information about the dose of the radiation received at the proposed site must be documented in the application. The absence of such information and/or a dose of >50Gy means that the application will not be approved.

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MEDICAL CONDITION	RATIONALE
Patients who are receiving chemotherapy.	For patients who are treated with chemotherapy for malignant disorders, dental implant treatment should be delayed until six months after completion of the treatment regime(s) and haematological recovery of the patient. Recommendation letter noting whether the patient will not need further local radiation/chemotherapy and that there has been haematological recovery to be obtained from the treating physician before performing implant surgery procedures. The likelihood of future treatment or the absence of such information means that the application will not be approved.
Patients who have undergone open heart surgery procedures to receive prosthetic heart valves, suffered myocardial infarction and cerebro-vascular accident (stroke).	Dental implant surgery should be delayed for a period of six months since discharge/recovery or according to the advice of the treating clinician. Copy of the discharge report or a letter from the treating clinician must be provided with prior approval request. The absence of such information or heart surgery within 6 months means that the application will not be approved.
Patients who are receiving intravenous (IV) bisphosphonates (e.g. for bone malignant disorders, tumour metastases involving bone, complex regional pain syndrome.	Patients on IV bisphosphonates have a higher known risk of developing medication-related osteonecrosis of the jaw (MRONJ) and should not be considered for implant treatment. Patients who are on oral bisphosphonates for osteoporosis, have a lower risk of developing (MRONJ). However, the risk of medication-related osteonecrosis of the jaw may get confounded with concomitant other immunosuppressive medications or diseases of the bone (e.g. Multiple Myeloma). These patients should be informed of this risk if they decide to undergo dental implant treatment.
A patient should not be considered for dental implant treatment if they smoke/ vape > 10 per day or are intending to smoke/vape.	Smoking/vaping is a risk factor for implant failures, loss of bone around the implants and failure of bone graft procedures.
Some rare bone disorders including Osteopetrosis, Paget's disease of bone involving the proposed implant site, Florid Cemento-Osseous Dysplasia and Fibrous dysplasia affecting site of the implant. Jaw surgery may also get affected by some of the medications they receive for these conditions.	In patients with these conditions, dental implant surgery may be prone to develop infection of the jawbones (Osteomyelitis) or implant may not osseointegrate in those sites. Your patient should be informed of this risk if they decide to undergo dental implant treatment. Please provide appropriate radiographs of the jaw bones and a medical report from the treating specialist indicating the diagnosis and the medications received by the patient. ACC is unlikely to approve an implant in the presence of these conditions.
Poorly controlled diabetic patients are inappropriate candidates for implant surgery. Poorly controlled diabetic patients (> 55 mmol/mol) should be able to demonstrate acceptable glycaemic control with three consecutive HbA1c tests, each one three months apart. (Acceptable range. <55 mmol/mol).	The current NZ guidelines for the management of diabetes include tables summarising risk factors for diabetes-associated complications. Refer to ***these guidelines and the Best Practice website*** for information on diabetic patients at low, moderate and high risk of complications.

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MEDICAL CONDITION	RATIONALE
Uncontrolled metabolic disorders, late stages of chronic nephritis, liver failure, severe systemic diseases including severe immunosuppression, acute leukaemia or relapse of chronic leukaemia.	These patients are at high risk of developing surgical and medical complications during surgery and postoperatively. Therefore, they are not suitable to undergo elective surgical procedures. High doses of oral steroid and the cumulative dose both pose risks to healing and need to be considered.
Temporomandibular disorders (TMD).	This is not a contraindication, but these patients may not be able to open their mouth fully for the proposed treatment procedure and may be at risk of aggravating their TMD.
History of facial bone fractures.	Implants can be placed after an appropriate healing period.

3. Dental health and history

An unstable and poorly cared-for mouth is a contraindication to complex restorative treatment including implant treatment. Where there is a generally poor oral condition with no evidence of regular check-ups and preventive dental care, please discuss with your patient alternative treatment options to address the immediate needs, such as a denture, and develop a long-term plan to address the current poor oral condition with a long-term view of applying for a dental implant/s when all criteria are met. ACC expects your patient to be able to demonstrate oral health stability and maintenance for a period of no less than five years.

If your patient presents with good oral status as defined below, however requires minimal remedial work, ACC will consider an implant application once the remedial work has been completed and is evidenced with x-rays, photos and clinical notes.

A good oral status is considered to be:	• minimal periodontal pockets and no greater than >4mm • minimal bleeding on probing • healthy gums • plaque and calculus are minimal • absence of gingivitis • presence of tooth caries and cavities is minimal to none.
Evidence of this would be shown with:	• full periodontal assessment and attachment level charting • full clinical notes • intra-oral photos of the whole dentition, including the occlusal surfaces and the dentition together.

3.1 Dental habits or oral conditions that preclude implant placement

CONDITION	RATIONALE
3.1.1 Poor oral hygiene habits	Dental implants require excellent homecare and regular professional care to prevent the build-up of harmful bacteria, which can lead to implant infection and possible failure. If your client presents with poor oral hygiene habits, these need to be addressed before submitting a prior approval for dental implants to ACC. The last five-year auditable dental history is required to provide evidence of your patient's oral hygiene habits. If the full five-year history is not available, you can supply what is available plus full clinical notes of current hygiene and dental assessments.

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CONDITION	RATIONALE
3.1.2 Caries, failing restorations and apical disease	Patients who have teeth with untreated caries and failing restorations should be stabilised and treated and any apical disease managed before considering applying for dental implant treatment.
3.1.3 Parafunction/grinding habits (bruxism)	You must demonstrate that your patient can be provided with a functional, maintainable and aesthetic implant-supported prosthesis that is protected from occlusal overload and trauma (e.g. fracture of the restoration or screws). Current radiographs and photographs are required to evidence this.
3.1.4 Periodontal disease	It is universally accepted that the build-up of bacterial plaque is the primary factor in peri-implant disease and implant failure. The scientific literature confirms that suboptimal oral hygiene, and the subsequent build-up of bacterial plaque and calculus, is the major risk of peri-implantitis. Periodontal pocketing and bleeding on probing substantially increase the risk of peri-implantitis. Likewise, a lack of regular supportive periodontal maintenance in an individual with a history of periodontal disease also greatly increases the risk of peri-implant disease. The placement of dental implants in an individual with untreated periodontal disease, substantial bleeding on probing, deep periodontal pocketing, suboptimal oral hygiene and a lack of regular preventive dental care would be inappropriate and would not be the acceptable standard of care.
3.1.4.1 Expected periodontal status for dental implant/s:	• Minimal periodontal pocketing • Minimal bleeding on probing • Minimal plaque and calculus • Minimal periodontal bone loss.
3.1.4.2 Evidence of periodontal health to be provided:	• Periodontal charting • Diagnostic labelled and dated radiographs • Intra-oral photos of the entire dentition • Full clinical notes for a period of no less than five years • Evidence of an auditable history of regular preventive dental care and supportive periodontal treatment.

4. Five-year auditable history

A five-year auditable history of regular dental check-ups and preventive dental care is required. This evidence indicates a person's ability and commitment to manage their ongoing dental maintenance and oral health.

A five-year auditable history must include:	• caries risk analysis • periodontal prognosis • maintenance records (caries treatment, extractions) • current oral hygiene and periodontal status.
A five-year auditable history must meet:	Dental Council Standards for quality, e.g. radiographs (named and dated), complete dental records and photographs.

ACC will consider applications without this five-year dental history, as long as all other criteria are met.

5. Stable dentition

Your patient must have stable dentition that is fully explained and evidenced by periodontal charting and photographs.

Stable dentition:	A continuous maxillary and mandibular dentition, with no other unfilled edentulous spaces from first molar to first molar (an existing fixed bridge; missing 7s and 8s; teeth extracted as part of comprehensive orthodontic treatment; or congenitally missing teeth are acceptable).

If your client does have pre-existing edentulous space/s, and the overall occlusal platform is not stable (as defined above), but the client meets the remainder of the patient implant selection criteria, they can choose to have implants placed with private funding to restore the occlusal platform either prior to the ACC-funded implant treatment or at the same time as the ACC implant.

The comprehensive treatment plan for both ACC and non-ACC treatment must be disclosed to ACC and evidence that the private implants were placed will be required in all circumstances.

Please note that ACC will only consider funding an implant for a 7s where a sound case for additional occlusal support can be established.

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