

The Practice of Dental
Technology and Clinical
Dental Technology and the
working relationship
within the Practice of
Dentistry –
Practice Standard

Preamble

Section 118 of the Health Practitioners Competence Assurance Act 2003 requires the Dental Council to set the standards of clinical competence, cultural competence and ethical conduct to be observed by the oral health practitioners it regulates.

These standards are set out in Dental Council practice standards, which are developed by, or in consultation with, the professions.

Introduction

The Dental Council defines the practice of dentistry as the maintenance of health through the assessment, diagnosis, management, treatment and prevention of any disease, disorder or condition of the orofacial complex and associated structures.

Dental technology and clinical dental technology practice are subsets of the practice of dentistry. The scopes of dental technology and clinical dental technology practice are described by the Dental Council pursuant to section 11 of the Health Practitioners Competence Assurance Act (2003) and are included in this **practice standard** in Appendix 1. Within these scopes a technician's practice must be commensurate with his or her approved education, training and competence. Technicians may only extend their practice to those areas defined in additional scopes of practice if they are registered and competent to do so.

This practice standard aims to protect the health and safety of members of the public by:

- describing what dental technicians and clinical dental technicians can do;
- providing guidance to dentists, dental specialists, dental technicians and clinical dental technicians on their legislative and professional responsibilities when sourcing or providing dental technology and clinical dental technology services; and
- assisting consumers to understand the professional relationships which apply between technicians and dentists when providing services which involve designing, making, repairing or fitting dental appliances.

The Practice of Dental Technology

Dental technicians design, construct and repair fixed and removable oral and extra-oral appliances and prostheses e.g. dentures, crowns, bridges, and implant supported prostheses to the prescription of another registered health practitioner e.g. dentist, dental specialist, clinical dental technician or medical practitioner who is authorised by their scope of practice to perform the fitting of the appliance or prosthesis.

In this context prescription is defined as an instruction, either written or verbal by an appropriately registered practitioner to a dental technician to carry out a procedure contained in their registered scope of practice. This authorisation should be included, or noted, in the patient's record.

Persons undertaking dental technology work, as described in the gazetted scope of dental technology practice, must be registered and hold a current annual practising certificate.

Dental technicians do not work directly on a patient, however they may:

- undertake non-clinical tasks; such as shade taking and shade checking which may include the removal of a pre-loosened temporary restoration and try-in of a permanent restoration, without removal or placement of an abutment, under the prescription and clear written procedures of, and final fitting¹ by, a dentist or dental specialist. In this circumstance the Dental Technician must ensure the patient returns to the prescribing dentist/dental specialist, as soon as possible on the same day, for the dentist/dental specialist to recement the restoration.

¹ Final fitting for dental technicians means ensuring the patient returns to the prescribing dentist /dental specialist as soon as possible on the same day for the refitting of the temporary or permanent restoration.

- undertake simple repairs² of dentures and in such cases must refer the patient to a suitable clinician and ensure a record of this referral is included in the patient record.

To gain registration as a dental technician applicants must have undertaken an accredited three-year full time degree in dental technology from the University of Otago (or equivalent). This training covers the study of biological systems of the human body, the physical and biological properties of the materials used in dental technology and the design and manufacture of dental appliances and prostheses. Dental technicians upon registration are therefore competent to ensure that the appliances they construct do not cause harm to patients, which can occur with the inappropriate selection or incorrect use of materials. Registered dental technicians are required to maintain and develop their skills and competence through regular and documented continuing professional development.

Members of the public can have confidence in the dental technology services provided through their dentist, or other health practitioner, if the dental technician providing the services is registered with the Dental Council and holds a current annual practising certificate (APC).

A Dental Technician wishing to have direct contact with patients must ensure that all facilities' procedures and practices comply with all Dental Council **practice standard** relevant to patient management (e.g. Cross infection, informed consent, record keeping and TMVI).

Working relationship with Dental Technicians

Health practitioners sourcing dental technology services have a responsibility to ensure that such services are provided by appropriately qualified and skilled persons. As such, dentists, dental specialists, clinical dental technicians and other health practitioners using such services must assess and have confidence in the skills and competence of dental technicians or other personnel undertaking their dental laboratory work. A verifiable measure of a dental technician's qualification, skill, and competence is whether he or she is registered with the Dental Council and holds a current annual practising certificate. Dentists, dental specialists and clinical dental technicians should ensure this when obtaining dental technical services.

The health practitioner should ensure that all products purchased and supplied by the laboratory are of an acceptable quality or standard and that a custom made appliance supplied to the health practitioner/patient can be traced in the event of a product recall or an adverse reaction or allergy complaint.

Health practitioners sourcing dental technology services have a responsibility to ensure their availability to provide timely professional advice, as required, to the dental technician undertaking their dental technology work. In addition the dentist/dental specialist referring patients for shade taking and shade checking must be available during the procedure, in case of an emergency, and as soon as possible on the same day to recement the restoration.

Dental technicians have a duty of care to recognise the need to seek professional advice from/to the prescribing practitioner when required and to seek such advice in a timely manner.

The Practice of Clinical Dental Technology

Clinical dental technicians design, construct and repair fixed and removable oral and extra-oral appliances and prostheses in the same way as dental technicians. Clinical dental technicians can also work as independent practitioners and deal directly with the public in making and fitting:

- complete removable dentures
- some other types of removable dentures and oral and extra oral appliances under specific conditions as set out below.

Similar to dental technicians, a prescription is defined as an instruction, either written or verbal by an appropriately registered practitioner to a clinical dental technician to carry out a procedure contained in their registered scope of practice. This authorisation should be included, or noted, in the patient's record.

² i.e. not involving impressions or relines.

Dentists, dental specialists and clinical dental technicians must ensure that patients are informed of all treatment options available.

Persons undertaking clinical dental technology work as described in the gazetted scope of clinical dental technology practice must be registered and hold a current annual practising certificate (APC).

To be registered as a clinical dental technician applicants are required to be registered as a dental technician and to have completed an accredited one-year full time or two-year part time Postgraduate Diploma in Clinical Dental Technology from the University of Otago (or equivalent).

1.1 Removable complete dentures

Clinical dental technicians may design, construct, repair, reline and fit complete dentures when there are no natural teeth remaining and there is no diseased or unhealed, hard or soft tissue. Clinical dental technicians must in the case of patients with diseased or persistently unhealed hard or soft tissue, or any other conditions outside their Scope of Practice assess and refer patients to a dentist, dental specialist or medical practitioner in a timely manner.

1.2 Removable partial dentures

Clinical dental technicians may design, construct, repair, reline and fit partial dentures, but only after a patient has obtained an oral health certificate from a dentist or dental specialist. A template oral health certificate is attached as Appendix 2.

In providing an oral health certificate dentists and dental specialists must ensure that there is no diseased or unhealed hard or soft tissues, or any other abnormalities contraindicating the provision of a partial denture.

Clinical dental technicians must not prepare the teeth and/or soft tissues for a partial denture; only a dentist or dental specialist may undertake such work.

If during the course of partial denture construction any condition outside the Scope of Practice of a clinical dental technician becomes evident the patient must be referred to a dentist or dental specialist in a timely manner.

1.3 Removable complete and partial immediate dentures

Clinical dental technicians may design, construct, repair and supply immediate dentures only on the prescription of a registered dentist or dental specialist.

Clinical dental technicians may take impressions and undertake other non-invasive procedures involved in the construction of an immediate denture, however only a dentist or dental specialist can fit an immediate denture. The dentist or dental specialist remains responsible for the clinical care outcomes of the patient.

1.4 Removable complete and partial root/tooth overdentures

Clinical dental technicians may design, construct, reline and repair root/tooth overdentures only on the prescription of a registered dentist or dental specialist.

Clinical dental technicians may take impressions and undertake other non-invasive procedures involved in the construction of a root/tooth supported overdenture, however only a dentist or dental specialist can perform the final fit³ of a root/tooth supported overdenture. The dentist or dental specialist remains responsible for the clinical care outcomes of the patient.

³ Final fitting for clinical dental technicians means ensuring the patient is referred back to the prescribing dentist/dental specialist for the subsequent management and ongoing monitoring of that patient's oral health.

Clinical dental technicians must not prepare the teeth and/or soft tissues for a complete or partial overdenture. Only a dentist or dental specialist may undertake such work.

1.5 Extra oral maxillofacial prostheses

Clinical dental technicians may design, construct, fit and repair extra-oral maxillofacial prostheses only on the prescription of a registered dentist, dental specialist or medical practitioner.

Clinical dental technicians may take impressions of extra-oral maxillofacial defects that are not in direct communication with the naso- or the oropharyngeal airway and undertake other non-invasive procedures involved in the construction and fitting of extra-oral maxillofacial prostheses, however the dentist, dental specialist or medical practitioner remains responsible for the clinical outcomes of the patient.

The only exception to the restriction on taking impressions of defects that are in direct communication with the naso- or the oropharyngeal airway is in circumstances where the clinical dental technician is doing so under the direct supervision of a dentist, medical practitioner or another health practitioner qualified to manage an airway emergency.

In addition clinical dental technicians whose formal training did not include extra-oral maxillofacial prostheses should undertake clinical procedures in this area only if they can demonstrate, if required, that they have the requisite knowledge and training to undertake this work in accordance with the Council's Policy on Advanced and New Areas of Practice.

1.6 Removable complete and partial overdentures on oral implants (general scope)

Clinical dental technicians, who are **not** registered in the additional scope of Implant Overdentures, may design, construct, trial fit, reline and repair removable complete and partial implant overdentures on oral implants only on the prescription of a registered dentist or dental specialist. This **does not include** removal or placement of abutments such as healing, temporary or permanent, or fixture level/subgingival impression copings.

Clinical dental technicians may take impressions and undertake other non-invasive procedures involved in the construction and trial fitting of an implant overdenture. The dentist or dental specialist must undertake the final fitting³ and remains responsible for the clinical outcomes of the patient.

1.7 Removable complete and partial overdentures on oral implants (additional scope of practice)

Clinical dental technicians, registered in this additional scope of practice, may design, construct, trial fit, reline and repair removable complete and partial implant overdentures on oral implants only on the prescription of a registered dentist or dental specialist.

Clinical dental technicians may take impressions and undertake other non-invasive procedures involved in the construction and trial fitting of an implant overdenture, however the dentist or dental specialist must undertake the final fitting³ and remains responsible for the clinical outcomes of the patient.

A clinical dental technician may only carry out the clinical procedures associated with implant overdentures if they are registered in this additional Scope of Practice. As such, dentists and dental specialists prescribing such treatment must ensure the clinical dental technician is registered in this additional scope before delegating the clinical tasks.

1.8 Dental appliance therapy for the treatment of sleep disorders

Dental technicians and clinical dental technicians may design, construct, repair and supply appliances for the treatment of sleep disorders but only on the prescription of a registered dentist, dental specialist or medical practitioner.

Clinical dental technicians may take impressions and undertake other non invasive procedures involved in the construction of sleep disorder appliances however only a dentist,

dental specialist or medical practitioner, who retains responsibility for the clinical care outcomes, can perform the final fit of the appliance.

Working relationship with Clinical Dental Technicians

Health practitioners sourcing clinical dental technology services have a responsibility to ensure that such services are provided by appropriately qualified, skilled and registered persons who hold a current practising certificate.

As such, dentists, dental specialists, and other health practitioners must assess and have confidence in the skills and competence of clinical dental technicians and be familiar with the Scope of Practice for clinical dental technicians.

Health practitioners sourcing clinical dental technology services have a responsibility to ensure their availability to provide timely professional advice, as required, to the clinical dental technician undertaking their clinical dental technology work.

Clinical dental technicians have a duty of care to recognise the need to seek and provide professional advice from/to the prescribing practitioner when required and to do this in a timely manner.

Before taking any impression or fitting any denture or appliance, clinical dental technicians have a responsibility to ensure that the patient's mouth is fit for the purpose, and free of disease, disorder or abnormality.

Apart from the use of tissue conditioners and soft lining materials, a clinical dental technician may not adjust, modify or treat the natural dentition, bone, soft tissue or dental restorations.

Both the prescribing health practitioner and clinical dental technician have a responsibility to ensure that a patient is informed of all treatment options available.

Notice of Scopes of Practice and Prescribed Qualifications Issued by the Dental Council pursuant to sections 11 and 12 of the Health Practitioners Competence Assurance Act 2003

Dental Technicians

Scope for Dental Technology Practice

The Scope of Practice for Dental Technicians is set out in the documented "Detailed Scope for Dental Technology Practice" produced and published from time to time by the Dental Council.

Dental Technology practice is a subset of the practice of dentistry, and is commensurate with a Dental Technician's approved education, training and competence.

It involves processes and procedures associated with the design, manufacture and repair of fixed and removable oral and extraoral appliances and prostheses prescribed by a practising dental specialist, dentist, clinical dental technician, medical practitioner or other practising health practitioner.

The working relationship between dental technicians and prescribing practising health practitioners is set out in the Dental Council: The Practice of Dental Technology and Clinical Dental Technology and the working relationship within the Practice of Dentistry - **Practice Standard**.

Detailed Scope for Dental Technology Practice

The Dental Council defines the practice of Dental Technology as processes and procedures associated with the design, manufacture and repair of fixed and removable oral and extraoral appliances and prostheses prescribed by a practising dental specialist, dentist, clinical dental technician, medical practitioner or other practising health practitioner.

This involves:

- selection of appropriate dental materials for the design, manufacture and repair of fixed and removable oral and extraoral appliances and prostheses prescribed by a practising dental specialist, dentist, clinical dental technician, medical practitioner or other practising health practitioner.
- processes and procedures associated with the design, manufacture and repair of:
 - complete removable dentures and overdentures.
 - removable partial dentures including precision attachments.
 - fixed and removable orthodontic appliances.
 - crowns and bridges including precision attachments on natural teeth and implants.
 - implant overdentures and implant supported dentures.
 - tissue and implant supported maxillofacial, ocular and auricular appliances and prostheses, and other appliances and prostheses involved in the overall prosthetic rehabilitation of patients.
 - specialist treatment appliances such as, but not limited to: diagnostic stents and radiographic stents, appliances for the treatment of temporomandibular disorders, appliances for the treatment of speech disorders, appliances for the treatment of sleep disorders and appliances for the treatment of audio disorders.
- undertake shade taking and shade checking, which may include the removal of a pre-loosened temporary restoration and try-in of the permanent restoration, without removal

or placement of an abutment, as prescribed by and prior to the final fitting⁴ by a dentist or dental specialist.

Practice in this context goes wider than dental technology to include teaching, research, and management, given that such roles influence clinical and technical practice and public safety. Areas of dental technology practice that were not included in a practitioner's training should not be undertaken unless the practitioner has completed appropriate training and practices to the standard required by the relevant **practice standard**.

Prescribed Qualifications

- Diploma in Dental Technology (issued by a New Zealand educational institution) and commenced prior to 18 September 2004; or
- Bachelor of Dental Technology (University of Otago); or
- an approved overseas dental technology qualification, plus a pass in the New Zealand Dental Technicians Registration Examination.

⁴ Final fitting for dental technicians means ensuring the patient returns to the prescribing dentist /dental specialist as soon as possible on the same day for the refitting of the temporary or permanent restoration.

Clinical Dental Technicians

Scope for Clinical Dental Technology Practice

The Scope of Practice for Clinical Dental Technicians is set out in the documented “Detailed Scope for Clinical Dental Technology Practice” produced and published from time to time by the Dental Council.

Clinical Dental Technology practice is a subset of the practice of dentistry, and is commensurate with a Clinical Dental Technician's approved education, training and competence.

It involves the scope of practice for Dental Technology, plus the fitting of complete removable dentures and the fitting of some other types of removable dentures and oral and extraoral appliances under specific conditions – as set out in the detailed scope of practice.

The working relationship between clinical dental technicians and prescribing practising health practitioners is set out in the Dental Council: The Practice of Dental Technology and Clinical Dental Technology and the working relationship within the Practice of Dentistry – Practice Standard.

Detailed Scope for Clinical Dental Technology Practice

The Dental Council defines the practice of clinical dental technology as:

- processes and procedures associated with the design, manufacture and repair of fixed and removable oral and extraoral appliances and prostheses prescribed by a practising dentist, dental specialist, medical practitioner or other authorised health practitioner as set out in the detailed scope for dental technology practice.
- taking impressions and undertaking other non-invasive clinical procedures involved in the fitting of removable complete dentures and the fitting of some other types of removable dentures and oral and extraoral appliances under specific conditions as set out below and as described below.
- taking impressions and undertaking other non-invasive clinical procedures involved in the trial fitting and repair of removable complete and partial implant overdentures prescribed and the final fitting⁵ by a dentist or dental specialist.

As well as the activities delineated in the detailed scope for dental technology practice, clinical dental technology practice involves:

- taking impressions and undertaking other non-invasive clinical procedures involved in the fitting and relining of removable complete dentures when there are no natural teeth remaining and there is no diseased or unhealed hard or soft tissue.
- taking impressions and undertaking other non-invasive clinical procedures involved in the fitting and relining of removable partial dentures subject to the patient having obtained an oral health certificate from a dentist or dental specialist.
- taking impressions and undertaking other non-invasive clinical procedures involved in the construction of removable complete and partial immediate dentures on the prescription of, and prior to the fitting by a dentist or dental specialist.
- taking impressions, relining and undertaking other non-invasive clinical procedures involved in the construction of removable complete and partial root/tooth overdentures subject to the patient having obtained an oral health certificate from and on the prescription of a dentist or dental specialist, and prior to the final fitting² by a dentist or dental specialist.
- processes and procedures associated with extraoral maxillofacial prostheses, for those with formal training or if they can demonstrate that they have the requisite knowledge and training to undertake this work ⁶:

⁵ Final fitting for clinical dental technicians means ensuring the patient is referred back to the prescribing dentist/dental specialist for the subsequent management and ongoing monitoring of that patient's oral health.

⁶ Practitioners should demonstrate that they have the requisite knowledge and training to undertake extraoral maxillofacial prostheses work in accordance with the Council's Policy on Advanced and New Areas of Practice.

- taking impressions and undertaking other non-invasive clinical procedures involved in the fitting, construction and repair of extraoral maxillofacial prostheses, that are not in direct communication with the naso- or the oropharyngeal airway under the prescription of a dentist, dental specialist or medical practitioner, who remains responsible for the clinical outcomes of the patient.
- taking impressions of maxillofacial defects that are in direct communication with the naso- or the oropharyngeal airway, for those clinical dental technicians with formal training or if they can demonstrate that they have the requisite knowledge and training to undertake this work, and only under the direct clinical supervision of a dentist, dental specialist or medical practitioner qualified to manage an airway emergency, who remains responsible for the clinical outcomes of the patient.
- taking impressions and undertaking other non invasive clinical procedures involved in the construction of removable complete and partial implant overdentures on the prescription of, and prior to the final fitting² by a dentist or dental specialist. This does not include removal or placement of abutments such as healing, temporary or permanent, or fixture level/subgingival impression copings.
- repairing and/or relining of removable complete and partial implant overdentures on the prescription of and prior to the final fit² by a dentist or dental specialist and appropriate referral when indicated.
- designing, constructing, repairing and supplying appliances for the treatment of sleep disorders only on the prescription of a registered dentist, dental specialist or medical practitioner.
- taking impressions and undertaking other non-invasive procedures involved in the construction of an anti-snoring device, however, only a dentist, dental specialist or medical practitioner, who retains responsibility for the clinical care outcomes, can perform the final fit² of the appliance.
- in relation to the above activities:
 - obtaining medical and dental histories and consulting with other health practitioners as appropriate.
 - examination of the oral tissues to ensure that the patient's mouth is fit for purpose and free of disease, disorder or abnormality.
 - referral of patients to a dentist, dental specialist or medical practitioner when any disease, disorder or abnormality is detected.
 - referral of patients to a dentist, dental specialist or medical practitioner for a prescription for an oral health certificate and treatment plan where required.
 - preparation of a treatment plan (in association with a prescription if required) and communicating this to the patient.
 - oral health education and promotion.

Practice in this context goes wider than clinical dental technology to include teaching, research, and management, given that such roles influence clinical and technical practice and public safety.

Areas of clinical dental technology practice which were not included in a practitioner's training should not be undertaken unless the practitioner has completed appropriate training and practises to the standard required by the Dental Council Policy on Advanced Areas of Practice and the The Practice of Dental Technology and Clinical Dental Technology and the working relationship within the Practice of Dentistry – Practice Standard.

Prescribed Qualifications

- Registration in the dental technology scope of practice and a postgraduate Diploma in Clinical Dental Technology (University of Otago).

Additional Scopes of Practice for Clinical Dental Technology Practice

Scope for Implant Overdentures

The Scope for Implant Overdentures in Clinical Dental Technology Practice is set out in the documented "Detailed Scope for Implant Overdentures" produced and published from time to time by the Dental Council.

The scope involves clinical procedures associated with the design, manufacture, trial fitting and repair of removable complete and partial implant overdentures prescribed and fitted by a practising dentist or dental specialist.

Detailed Scope for Implant Overdentures

As well as the activities delineated in the detailed scopes for dental technology and clinical dental technology practice, the additional scope for implant overdenture practice includes:

- taking impressions and undertaking other non invasive clinical procedures involved in the construction of removable complete and partial implant overdentures on the prescription of, and prior to the final fitting⁷ by, a dentist or dental specialist.
- repairing removable complete and partial implant overdentures prescribed and fitted by a dentist or dental specialist and appropriate referral when indicated.
- relining removable complete and partial implant overdentures on the prescription of, and prior to the final fitting by a dentist or dental specialist⁴.

Prescribed Qualification

- Registration as a Clinical Dental Technician plus evidence of appropriate training, completion or commencement of at least 8 documented cases and a competency attestation from an appropriately qualified dentist or dental specialist⁸.

⁷ Final fitting for clinical dental technicians means ensuring the patient is referred back to the prescribing dentist/dental specialist for the subsequent management and ongoing monitoring of that patient's oral health.

⁸ The prescribed qualification above was available until 1 July 2007. Thereafter the prescribed qualification for registration in the additional scope of Implant Overdentures will be the successful completion of a Dental Council approved implant overdenture course or a pass in the Dental Council implant overdenture registration examination.

Patient's Name: _____ Date of birth: _____

Address: _____

Referred by: _____
(Name of clinical dental technician)

In my opinion, on: _____
(State date of examination by dentist)

1. The patient is dentally fit¹ and the condition of the denture bearing area is satisfactory for the fitting of dentures.

Treatment by a dentist is NOT required before denture treatment can commence

2. Required modifications to the teeth such as rest seats **have/have not** been undertaken.
(circle one)

3. The patient is not dentally fit but the oral condition of the denture area is satisfactory for the fitting of dentures.

Denture treatment may commence but treatment by a dentist is required to restore dental fitness

4. The patient is not dentally fit and the oral condition of the denture area is not satisfactory for the fitting of dentures.

Treatment by a dentist is required before denture treatment can commence.

(Delete whichever does not apply in 1, 3 and 4 above and use the space below for any further comments, eg relevant medical or dental history details)

This certificate of oral health is provided in good faith, without prejudice, and applies for the purposes of a removable partial denture.

It is valid on the date of the examination and expires² on: _____

(State expiry date of certificate)

The clinical dental technician remains responsible for the clinical care outcomes in relation to the provision and fitting of the patient's denture.

Signed: _____ Date: _____
(Dentist to sign)

Dentist's name and address _____

¹ Dentally fit means no diseased or unhealed hard or soft tissues or disorders or abnormalities contraindicating the provision of the partial denture. It also means that the abutment teeth are suitable for a partial denture and that there is no caries, pulp or periapical disease or periodontal conditions requiring treatment.

² It is recommended that an expiry date of 90 days be used.