

Comparison between proposed clinical dental technology and dental technology competencies

	Clinical dental technology	Dental technology
Domain 1: Professionalism – same as other professions		
Domain 2: Communication – same as other professions		
Domain 3: Cultural safety – same as other professions		
Domain 4: Critical thinking – same as other professions		
Domain 5: Mōhiotanga pūtaiao me te haumarū - Scientific and clinical knowledge		
Application of scientific and clinical knowledge	<p>A clinical dental technician will be able to apply the scientific and clinical knowledge base relating to:</p> <ul style="list-style-type: none"> • Fundamental principles of chemistry, physics, and engineering as they relate to clinical dental technology. • Anatomy and physiology of the head, neck and oral cavity relevant to clinical dental technology. • Oral diseases and disorders, to enable identification of abnormalities. • Tooth development, tooth eruption and the occlusal development of the dentition in relationship to the development of the craniofacial complex. • The effect of tooth loss, and the impact of appliances, on the oral environment. • The nutritional habits and requirements of elderly and edentulous patients. • The core principles of infection prevention and control, including standard precautions, reprocessing of reusable items, performance testing and validation. This includes consideration of tikanga Māori/customs. • The influence of medicines, rongoā Māori and therapeutic agents on the provision of clinical dental technology services. • The science of dental materials used in the design and manufacture of prostheses and appliances. This includes: <ul style="list-style-type: none"> ○ clinical, physical and biological properties ○ how and why these may be modified by manipulation, environmental and chemical modifiers ○ how these changes relate to the success or failure of the material ○ safety and Te Taiao/environmental considerations. 	<p>A dental technician will be able to apply the scientific and clinical knowledge base relating to:</p> <ul style="list-style-type: none"> • Fundamental principles of chemistry, physics, and engineering as they relate to dental technology. • Anatomy and physiology of the head, neck, and oral cavity, relevant to dental technology. • Tooth development, tooth eruption and the occlusal development of the dentition in relationship to the development of the craniofacial complex. • The effect of tooth loss, and the impact of appliances, on the oral environment. • The core principles of infection prevention and control, including standard precautions, and reprocessing of reusable items, performance testing and validation when applicable (for example, when reusable items have been in contact with the oral environment). This includes consideration of tikanga Māori. • The science of dental materials used in the design and manufacture of prostheses and appliances. This includes: <ul style="list-style-type: none"> ○ clinical, physical and biological properties ○ how and why these may be modified by manipulation, environmental and chemical modifiers ○ how these changes relate to the success or failure of the material ○ safety and Te Taiao/environmental considerations.
Domain 6. Tiaki turoro - Patient care		
Obtaining prescribing clinician and patient information	<p>A clinical dental technician will be able to effectively obtain:</p> <ul style="list-style-type: none"> • Prescribing clinician and patient information relevant to the design, manufacture and delivery of prostheses and appliances, for example, name and address of the prescribing practitioner, name of the patient, a detailed prescription, etc. 	<p>A dental technician will be able to effectively obtain:</p> <ul style="list-style-type: none"> • Prescribing clinician and patient information relevant to the design, manufacture and delivery of prostheses and appliances, for example, name and address of the prescribing practitioner, name of the patient, a detailed prescription, etc. <p><i>When providing repair services direct to patients</i></p> <ul style="list-style-type: none"> • Information related to a patient's: <ul style="list-style-type: none"> ○ presenting problem ○ concerns, ideas, wishes and expectations. <p><i>When carrying out shade taking procedures</i></p> <ul style="list-style-type: none"> • Information related to a patient's: <ul style="list-style-type: none"> ○ concerns, ideas, wishes and expectations ○ current medical conditions, and allergies - to enable safe practice and effective management of medical emergencies.
Analysing the health practitioner's prescription and patient information	<ul style="list-style-type: none"> • Analyse the health practitioner's prescription and the patient information to design and manufacture suitable prostheses and appliances using appropriate materials; and make repairs. 	

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Clinical information gathering	<p>A clinical dental technician will be able to effectively gather information relating to:</p> <ul style="list-style-type: none"> • Patients' presenting complaint/s, concerns, ideas, wishes and expectations, including Te Reo Māori me ona Tikanga. • Medical, oral health, cultural and whānau or family histories, and recognise the relationship between general hauora/health and oral health. • The clinical examination of edentulous and partially dentate patients requiring removable prosthodontic appliances. • Dental and soft tissue abnormalities. • Dietary habits and behaviours – as related to the nutritional requirements of elderly and edentulous patients, and oral hygiene practices. 	N/A
Analysing clinical information	<ul style="list-style-type: none"> • Analyse the information gathered to determine the patient's requirements related to providing removable prosthodontic appliances. • Recognise the need to consult with other health practitioners on matters related to the patient's medical and oral health history, as appropriate. • Recognise the need to refer to a dentist or dental specialist when any oral disease, disorder or abnormality is detected. • Recognise when to refer to a dentist, dental specialist, or medical practitioner for an oral health certificate, and a comprehensive care plan if required. 	N/A
Oral health care planning	<p>When developing a plan for care, a clinical dental technician will be able to:</p> <ul style="list-style-type: none"> • Understand and consider each patient's individual preferences, needs and cultural values, their hinengaro/wairua/psychological and social situation. This includes the specific needs of patients who are young/tamariki, anxious, older adults and patients with special needs in their requirements to achieve oral health equity. • Identify oral health problems, and formulate an evidence-based, patient-centred plan for care (in association with a prescription if required) that includes: <ul style="list-style-type: none"> ○ referral to a dentist, dental specialist, or medical practitioner, when required ○ oral health education and promotion related to the planned clinical dental technology care ○ priority of management ○ options for care ○ involvement of, and support for, whānau and carers/kāiawhina, and ○ anticipated outcomes and future needs. • Identify where the patient's medical condition/s rongoā Māori, medications may influence the plan for care and the anticipated outcomes. <p>A clinical dental technician will be able to:</p> <ul style="list-style-type: none"> • Determine whether they have the knowledge, skills and competence to provide for the patient's health needs and wishes, and refer appropriately to another oral health or health practitioner when they do not. • Gain informed consent, appropriate for the individual, and ensure informed consent remains valid throughout. 	<p><i>Titled: Planning services</i></p> <p>A dental technician will be able to:</p> <ul style="list-style-type: none"> • Determine whether they have the knowledge, skills and competence to provide the services required, and refer appropriately when they do not. <p>When planning to provide repair services direct to patients:</p> <ul style="list-style-type: none"> • Gain informed consent, appropriate for the individual, and ensure informed consent remains valid throughout. • Refer the patient to the appropriate oral health professional for an intra-oral examination to ensure that the repaired prosthesis or appliance is fit for purpose.
Providing care	<p>Note: these competencies are in addition to those described under "Providing services" in the document 'Dental technician competencies'</p>	Refer – providing services
<i>Removable complete and partial dentures</i>	<ul style="list-style-type: none"> • Take impressions and perform non-invasive clinical procedures involved in the fitting and relining of: <ul style="list-style-type: none"> ○ removable dentures for edentulous patients when there is no diseased or unhealed hard or soft tissue. ○ removable partial dentures, subject to the patient having obtained an oral health certificate from a dentist or dental specialist. 	

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<i>Removable complete and partial immediate dentures</i>	<ul style="list-style-type: none"> Take impressions and perform non-invasive clinical procedures involved in: <ul style="list-style-type: none"> The design and construction of removable complete and partial immediate dentures on the prescription of a dentist or dental specialist who performs the final fitting¹. 	
<i>Removable complete and partial root/tooth overdentures</i>	<ul style="list-style-type: none"> Take impressions and perform non-invasive clinical procedures involved in: <ul style="list-style-type: none"> The design, relining and construction of removable complete and partial root/tooth overdentures, on the prescription of a dentist or dental specialist who has provided an oral health certificate and performs the final fitting. 	
<i>Extra-oral maxillofacial prostheses²</i>	<ul style="list-style-type: none"> Take impressions and perform non-invasive clinical procedures involved in: <ul style="list-style-type: none"> The fitting, construction and repair of extra-oral maxillofacial prostheses that are not in direct communication with the naso- or oropharyngeal airway, under the prescription of a dentist, dental specialist or medical practitioner who is responsible for the patient's clinical care outcomes. Take impressions of maxillofacial defects that are in direct communication with the naso- or oropharyngeal airway, under the clinical supervision of a dentist, dental specialist or medical practitioner qualified to manage an airway emergency and who is onsite at the time, and who is responsible for the patient's clinical care outcomes. 	
<i>Removable complete and partial Implant overdentures</i>	<ul style="list-style-type: none"> Take impressions and undertake non-invasive clinical procedures involved in: <ul style="list-style-type: none"> The design and construction of removable complete and partial implant overdentures, on the prescription of a dentist or dental specialist who performs the final fitting. This does not include removal or placement of abutments such as healing, temporary or permanent, or fixture level/subgingival impression copings. Repair and/or reline removable complete and partial implant overdentures, on the prescription of a dentist or dental specialist who performs the final fitting. 	
<i>Clinical dental technicians registered in the additional scope of practice for implant overdentures</i>	<ul style="list-style-type: none"> Take impressions and undertake non-invasive clinical procedures involved in: <ul style="list-style-type: none"> The design, construction of removable complete and partial implant overdentures, on the prescription of a dentist or dental specialist who performs the final fitting. This may include removal or placement of abutments such as healing, temporary or permanent, or fixture level/subgingival impression copings. Repair removable complete and partial implant overdentures previously prescribed and fitted by a dentist, without the need for prescription for the repair, with appropriate referral when indicated. 	
<i>Management of sleep disorders and anti-snoring devices</i>	<ul style="list-style-type: none"> Design, construct, repair and supply appliances for the treatment of sleep disorders on the prescription of a dentist, dental specialist or medical practitioner. Take impressions and perform other non-invasive procedures involved in the design and construction of an anti-snoring device for final fitting by the dentist, dental specialist or medical practitioner who is responsible for the patient's clinical care outcomes. 	
<i>Miscellaneous appliances</i>	<ul style="list-style-type: none"> Take impressions, design, construct and supply the following to patients without prescription: <ul style="list-style-type: none"> Mouthguards Bleaching trays (and meeting related legal obligations on supply). Take impressions, design, and construct the following appliances on prescription of, and for final fitting by, a dentist or dental specialist: <ul style="list-style-type: none"> Bite splints Orthodontic appliances Appliances for treatment of temporomandibular joint disorders. 	

¹ Final fitting for clinical dental technicians means ensuring the patient is referred back to the prescribing dentist/dental specialist for subsequent management and ongoing monitoring of the patient's oral health.

² Formal training, or demonstration of the requisite knowledge and training, is required to perform these procedures.

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Providing services	Refer – providing care	
<i>Design, manufacture, and repair</i>		<ul style="list-style-type: none"> Design, manufacture, and repair fixed and removable oral and extraoral appliances and prostheses, so they are fully functional, effective, and aesthetically pleasing, including: <ul style="list-style-type: none"> 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 Appliances for the treatment of temporomandibular, speech, sleep, and audio disorders Diagnostic and radiographic stents.
<i>Dental materials, and design and manufacturing techniques</i>		<ul style="list-style-type: none"> Select dental materials and manufacturing techniques for use in the manufacture and repair of fixed and removable prostheses and appliances, appropriate for their application. Ensure that the manufacturer's guidelines are followed for materials and components used in the manufacturing of prostheses and appliances. Use a range of recognised design and manufacturing techniques including contemporary digital technology.
<i>Shade selection and reproduction</i>		<ul style="list-style-type: none"> Take and reproduce the shade of the natural dentition. Check shades, which may include the removal of a pre-loosened temporary restoration and try-in of the permanent restoration, without removal or placement of an implant abutment, as prescribed by and prior to the final fitting³ by a dentist or dental specialist.
<i>Maintenance</i>		<ul style="list-style-type: none"> Provide advice on the care and maintenance of prostheses and appliances.
<i>Medical emergencies</i>	<ul style="list-style-type: none"> Manage medical emergencies that may occur during clinical dental technology practice. 	
Safe practice	<ul style="list-style-type: none"> Establish, manage, and maintain a safe working environment for patients, staff and colleagues; and to protect the public. This includes a culturally safe workplace, the routine and proper use of infection prevention and control measures, and following safe radiation practices – where required. Identify and appropriately manage potential hazards (including hazardous materials), and behavioural risks in the place of work. Understand the principles and legal obligations of waste management and show awareness of practices used to limit unnecessary waste. Produce and maintain accurate, time-bound, and up-to-date patient records which are secure. Complete a comprehensive medical history: medical conditions, current rongoā Māori, medications (prescribed and non-prescribed) and allergies. Manage a medical emergency appropriately and effectively in their workplace within their prescribed resuscitation training. 	<ul style="list-style-type: none"> Establish, manage, and maintain a safe working environment for patients, staff and colleagues; and to protect the public. This includes a culturally safe workplace and the routine and proper use of infection prevention and control measures. Identify and appropriately manage potential hazards (including hazardous materials), and behavioural risks in the place of work. Understand the principles and legal obligations of waste management and show awareness of practices used to limit unnecessary waste. Produce and maintain accurate, time-bound, and up-to-date patient records which are secure. Confirm with the patient any current medical condition/s or allergies they might have. Manage a medical emergency appropriately and effectively in their workplace within their prescribed resuscitation training.
Teamwork	same as other professions	
The practice environment	<ul style="list-style-type: none"> Develop and comply with systems and processes in their workplace to support safe and effective patient care. Effectively manage their own time and resources. Describe the basic principles of practice administration and management. Be familiar with the use of contemporary information technology tools commonly used in practice to support safe and effective care. 	

³ 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 fitting of the permanent restoration.