THE DENTURIST ASSOCIATION OF ONTARIO
1972 50th ANNIVERSARY 2022

ARS ET SCIENTIA
COLLEGE OF DENTURISTS OF ONTARIO

COLLEGE OF DENTURISTS OF ONTARIO

DENTURIST GROUP OF ONTARIO

A Proposal for an Update of the Denturism Scope of Practice

Table of Contents

1. Background

This proposal, created in collaboration between the College of Denturists of Ontario, Denturists Association of Ontario, and the Denturists Group of Ontario, seeks to present incremental solutions that, if adopted by the Government of Ontario, would vastly enhance the patient experience of those receiving denturism care and greatly reduce the barriers for interprofessional collaboration between Denturists and Dentists/Dental Surgeons.

By empowering Denturists to update their scope of practice, the province can maximize the roles of the oral health care team that exists today, reduce costs for patients and governmental programs, and deliver timely, patient-centered care. These advancements reflect a forward-thinking approach to oral health care delivery that would once again elevate Ontario as the provincial leader in denturism service and care.

The vision underpinning this proposal is to create a more accessible, efficient, and patient-centered oral health care system. By permitting Denturists to perform radiographs and manage implant abutments, this initiative would reduce the need for redundant visits between Dentists and Denturists. Patients could directly access comprehensive denture care, including radiographs, during a single appointment, thereby expediting treatment and minimizing travel and scheduling burdens. This direct pathway not only saves time but also facilitates a more seamless transition between oral health care providers working on a joint patient case files.

Impact Statement

The impact of these changes would be multifaceted. For patients, this proposal represents a significant improvement in convenience and access. Comprehensive denture care can all be provided in a single location reducing the back-and-forth visits between different providers.

From a systemic perspective, enabling Denturists to utilize radiographic technology and handle implant abutments will unlock additional health and human resource capabilities. Denturists are currently the only patient-facing oral health care professional in Ontario that lacks radiographic capabilities. This redistribution of responsibilities allows Dentists to focus on more complex procedures, optimizing their expertise while allowing Denturists to take on tasks within their competencies. This approach not only improves the efficiency of the oral health team but also aligns with Ontario's broader goal of addressing health human resource challenges by utilizing every practitioner to their full scope, respectively.

Cost considerations further underscore the proposal's merits. While radiographic services would incur fees, these costs would be lower than those outlined in the Dentist's fee guide, representing potential savings for government dental programs, insurance providers, and patients. For example, the integration of radiographic services into Denturists' practice eliminates the need for patients to book separate appointments with Dentists, reducing travel costs and appointment scheduling complexities. The bundling of denturism services into a single fee structure ensures that the patient experiences no unexpected financial burden.

An Aging Population and Financial Barriers to Access

Ontario's population is projected to grow by nearly 15% over the next decade. The number of seniors aged 75 and older is expected to rise by 49.3%, from 1.2 million to 1.8 million[1]. According to the *Journal of the Canadian Dental Association*, 6.4% of Canadian adults aged 65 and older report being completely edentulous, with even higher rates among low-income seniors and those in long-term care facilities.[2]

For older adults, untreated oral health issues can exacerbate systemic health conditions, such as diabetes and cardiovascular disease, which are common in this demographic. The journal states that 73% of seniors experience dental decay, while 21% suffer from untreated gum disease, highlighting the urgent need for accessible and preventive dental care. Moreover, demand for denture-related services is expected to rise significantly, driven by a projected 49.3% increase in Ontario's population of seniors aged 75 and older by 2033.[3]

Financial barriers continue to prevent many Ontarians, particularly those in low-income and marginalized communities, from accessing oral health care. Statistics Canada released data from the Canadian Oral Health Survey conducted in 2023/2024 that noted one in four (24%) Canadian avoided visiting an oral health care professional in the past year due to costs[4]. This is in contrast with Canadians who had higher incomes and access to some form of health insurance who reported 15% avoided dental visits due to costs.

Programs like the Canada Dental Care Plan (CDCP) and Ontario Senior Dental Care Plan (OSDCP) aim to address these inequities by expanding coverage for uninsured Canadians. However, expanding coverage alone is insufficient if there is inadequate provider capacity to deliver care.

Regulatory data reports that the average net growth rate of Denturists in Ontario between 2014 and 2024 was just 2.4%, representing approximately 18 net new Denturists per year.[5] This modest growth is insufficient to keep pace with the increasing demand driven by population growth and aging.

This proposal provides the province with solutions that would maximize the capabilities of the current oral health care team, including Denturists, to meet the unprecedented increase in demand in the coming years.

---

[1] Government of Ontario, *Your Health: A Plan for Connected and Convenient Care, Long-Term Support: The Capacity Plan,* 2023.
[2] Grootendorst et al., J Can Dent Assoc 2024;90:o3
[3] Government of Ontario, *Your Health: A Plan for Connected and Convenient Care, Long-Term Support: The Capacity Plan,* 2023.
[4] Statistics Canada, *Canadian Oral Health Survey (COHS)*, 2024
[5] College of Denturists of Ontario, *Annual Reports,* 2014-2024

2. Proposed Updates to Scope of Practice

The current Scope of Practice as set out in the *Denturism Act* states "The practice of denturism is the assessment of arches missing some or all teeth and the design, construction, repair, alteration, ordering and fitting of removable dentures."

The following are proposed updates to the Scope of Practice statement:

Implants

- **Insert implant-supported dentures**
  Denturists would be permitted to insert implant-supported dentures onto implants previously placed by Dentists or Dental Surgeons, ensuring proper retention and function on metal-to-metal contact. This may involve removing denture-related implant components such as healing caps, placing abutments, and then inserting dentures.
- **Maintain and replace denture-related implant components**: Denturists would be permitted to manage the routine maintenance of denture-related implant components including replacing them if necessary to ensure proper function e.g. replacing abutments.

Radiographs

- **Prescribe radiographs**: Denturists would determine the need for x-rays within their scope of care.
- **Take and process radiographs**: Denturists would capture and analyze images to inform the most appropriate treatment.
- **Serve as Radiation Protection Officers (RPOs)**: Denturists would oversee safe radiographic practices in their clinics.

Referrals to Other Oral Health Professionals

- Refer patients with abnormalities to dental specialists including oral surgeons.

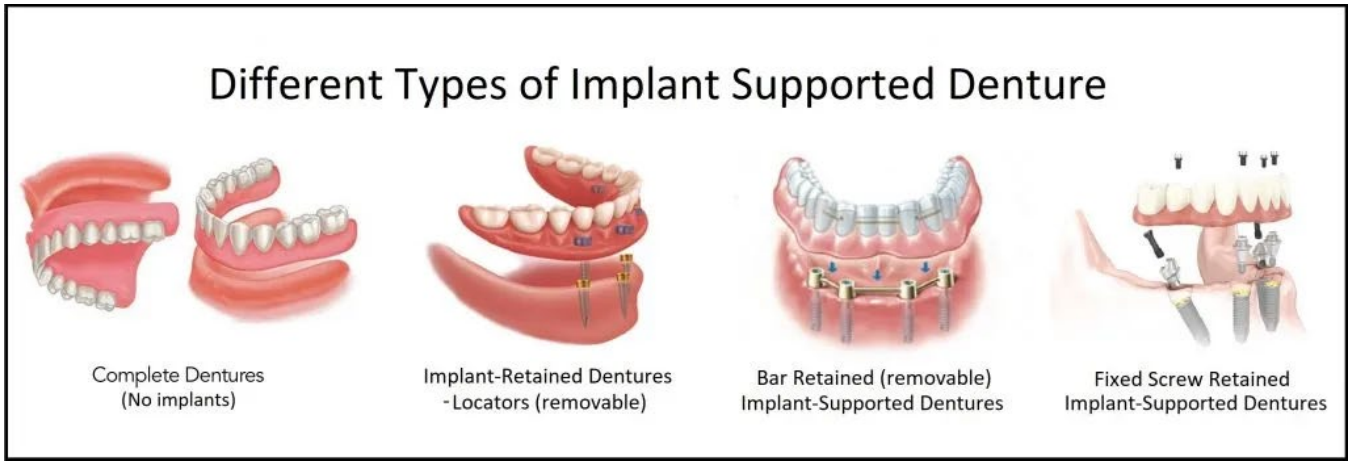


Figure 1: Different types of implant supported dentures. Source: Levenson Periodontal Associates, "Different Types of Implant Supported Dentures", 24 Jan. 2024, https://levensonperio.com/implant-retained-denture/

3. Implant Supported Dentures

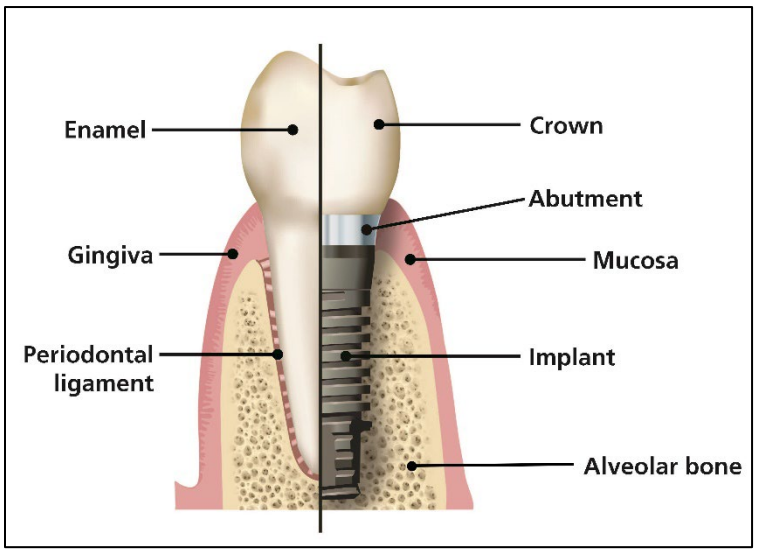


Figure 2: Anatomical Differences Between Tooth and Implant.

Note the mucosa line and location of the abutment. The dental crown depicted can be interchanged with implant-supported dentures.

Source: Scottish Dental Clinical Effectiveness Programme, Periodontal Care, "Dental Implants", Feb 2024, https://www.periodontalcare.sdcep.org.uk/guidance/dental-implants

Implant-supported dentures have become the preferred treatment for edentulous patients due to their exceptional stability, ability to restore mastication forces, and effectiveness in preventing bone loss by anchoring the jawbone. These benefits enhance patients' quality of life by improving chewing and digestion, preventing malnutrition, and reducing reliance on emergent or primary care services. Despite the growing demand for implant-supported dentures, a legislative technicality in Ontario's controlled acts framework have hindered Denturists from fully contributing to this transformative area of oral health care.

When the *Regulated Health Professions Act (RHPA), 1991* was first enacted, the use of dental implants was still in its infancy. The legislation did not anticipate procedures involving metal-to-metal contact with implant components, focusing instead on invasive acts "below the surface of a mucous membrane." This omission has led to regulatory ambiguity regarding Denturists' ability to affix or adjust dentures on implant abutments placed and stabilized by Dentists or Dental Surgeons. Importantly, these procedures are considered low risk and non-invasive, as they involve removing implant healing caps and attaching prefabricated dentures onto implant abutments without any cutting or penetration of tissue.

Other jurisdictions, such as Alberta and Quebec, have proactively addressed this gap by updating their respective legislation. In these provinces, Denturists are authorized to work on implant supported dentures and replace denture related implant components, reflecting the prominent role of implant treatments in modern oral health care. Ontario, however, has yet to update its framework, leaving patients without the ability to access the wider scope of treatment and Denturists constrained in their ability to provide comprehensive care.

The Legislative Technicality

The RHPA's delineation of controlled acts based on tissue involvement created a framework that excluded procedures involving metal-to-metal contact with implants. Dental implants, which may be positioned above, at, or below the mucosa line depending on a patient's oral structure, do not fit neatly into this framework. This regulatory oversight extends to the term "removable dentures," which creates further uncertainty about whether implant-supported dentures fall within the current scope of Denturists' practice.

Denturists, by training and practice, focus on non-invasive care. Their role in implant-supported dentures involves attaching dentures to implant abutments already placed by Dentists or Dental Surgeons, following confirmation that the implants are stable and healed. These procedures are routine and do not involve any invasive acts. The lack of clarity in the legislation has unnecessarily restricted collaborative work between Denturists and Dentists since 1991, placing undue burdens on patients.

Fragmented Care

The absence of regulatory clarity disproportionately affects vulnerable populations, who represent the primary demographic served by Denturists. Many patients requiring implant-supported dentures face significant transportation and scheduling challenges. Currently, these patients must:

1. Visit their Denturist to collect the completed dentures.
2. Schedule a separate appointment with a Dentist or Dental Surgeon to have the dentures affixed onto the implants.
3. Return to the Denturist for multiple adjustments.

This fragmented care pathway creates delays in treatment, increases costs for patients, and adds unnecessary administrative burdens to the health care system. In contrast, Denturists are already equipped to independently provide complete and partial denture care without referrals, enabling a seamless patient experience for non-implant cases.

Allowing Denturists to insert implant-supported dentures and maintain and replace denture-related implant components would reduce these barriers by consolidating care into fewer appointments. This would result in greater efficiency, reduced travel burdens for patients, and faster treatment completion—particularly for those who face geographic or financial challenges.

Alignment with Other Jurisdictions

Alberta and Quebec offer a model for modernizing Ontario's legislative framework. These provinces, along with the United Kingdom, have recognized the importance of Denturists' role in implant-supported dentures, granting them the authority to affix and adjust implant abutments. These regulatory updates have improved care delivery by enabling Denturists to work collaboratively with Dentists and Dental Surgeons, ensuring patients receive timely, high-quality care.

Ontario, Alberta, and Quebec are unique in having established denturism educational institutions, standalone regulatory bodies, and robust regulatory frameworks. However, while Alberta and Quebec

have updated their regulations to reflect advancements in dental implant technology, Ontario lags behind. This regulatory disparity also affects labour mobility, as Denturists registered in Ontario face additional barriers when transferring credentials to other provinces that recognize broader scopes of practice.

4. Radiographs

Radiographs are a critical tool in oral health care, enabling the assessment, planning, and monitoring of treatment, particularly for denture care and implant-supported prostheses. Despite their importance, Denturists in Ontario are uniquely restricted among patient-facing oral health professionals from prescribing, taking, processing, and interpreting radiographs (Dentists, Dental Assistants, and Dental Hygienists have some form of radiographic capabilities). This limitation represents a significant oversight in the capabilities of the oral health care team and a missed opportunity to enhance the efficiency and accessibility of care.

Permitting Denturists to incorporate radiographic services into their practice would unlock untapped human resource potential within existing oral health care teams creating further capacity for Dentists and Dental Surgeons to work on complex cases that require their sole technical expertise.

Currently, patients of Denturists must rely on Dentists to complete necessary imaging prior to treatment planning. This is even more prevalent as the Canadian Dental Care Plan (CDCP) most recently required radiographs as part of the pre-determination process for treatments, adding redundant appointments and administrative burdens for patients and providers.

Proposed Radiographic Abilities

The proposal delineates radiographic responsibilities into three categories:

1. **Prescribing Radiographs** Denturists would have the authority to prescribe dental radiographs related to denture care. This addition would improve detailed patient record-keeping and streamline patient care pathways. International jurisdictions, including Alberta, Quebec, and the United Kingdom, have already demonstrated the efficacy of this approach by integrating radiographic prescribing into Denturists' scope of practice.

2. **Taking and Processing Radiographs** Denturists are currently the only patient-facing oral health professionals in Ontario who lack the authority to take and process x-rays, unlike Dentists, Dental Hygienists, and Dental Assistants. By granting Denturists this capability, clinics could maximize their workforce efficiency, allowing Dentists and other team members to focus on specialized tasks. This change would enable clinics to see more patients, optimize the division of labor, and improve overall patient care.

3. **Serving as Radiation Protection Officers (RPOs)** Denturists have operated independently in Ontario since 1973 and have defined scopes of practice under the *RHPA* and *Denturism Act*. Allowing Denturists to serve as RPOs would align their role with their current ability to operate

standalone clinics, enhancing the accessibility and autonomy of their services. This capability is particularly important for implant-supported denture treatment plans, where radiographic imaging is often required to ensure proper seating and alignment of implant components.

Benefits of Radiographic Integration

1. **Enhanced Decision-Making**
   Radiographs provide vital insights into the oral cavity, enabling Denturists to make informed decisions tailored to individual patient needs. This capability improves treatment outcomes by identifying issues such as bone loss, tooth condition, and implant stability.

2. **Improved Patient Record-Keeping**
   Radiographs taken by Denturists would enhance documentation and communication with other health professionals and insurance providers. Accurate records enable faster claim approvals and more seamless interdisciplinary collaboration.

   The CDCP currently requires radiographs as part of the pre-determination process for treatments relating to partial dentures. This requires x-ray-specific appointments with Dentists for patient cases that can be otherwise all managed by a Denturist.

3. **Increased System Efficiency**
   Allowing Denturists to perform radiographs reduces referrals and delays, ensuring patients receive care in fewer visits. This streamlined approach is particularly beneficial for implant-supported dentures, where verification of seating often requires additional appointments with Dentists.

4. **Maximized Workforce Utilization**
   Denturists equipped with radiographic capabilities will further the health and resource capacity of the oral health care team. This redistribution of responsibilities allows the oral health team to work more efficiently, reducing wait times and enhancing patient experiences.

5. **Cost Savings for Patients**
   By eliminating the need for x-ray-specific appointments with Dentists, patients save on travel expenses and avoid unnecessary fees. This is particularly impactful for vulnerable populations and those in rural or remote areas.

6. **Addressing Implant-Supported Denture Needs**
   Radiographs are indispensable for the successful placement and adjustment of implant-supported dentures and partial dentures. Denturists currently lack the authority to confirm the seating of implants through imaging, requiring patients to schedule additional appointments with Dentists for verification. This fragmented care process not only delays treatment but also adds financial and logistical burdens.

By enabling Denturists to prescribe and perform radiographs, this proposal ensures that care is delivered at the right place and time. Patients would no longer need to make separate visits for imaging, improving their overall experience and treatment efficiency.

7. **Safety and Technological Advancements**
   The safety of dental radiographs has improved significantly with the advent of digital imaging technologies. Modern x-ray equipment minimizes radiation exposure through targeted beams and reduced dosages. The American Dental Association (ADA) now recommends digital radiography as the standard for dental imaging, citing its precision and safety benefits. Additionally, the elimination of outdated practices, such as the use of thyroid collars, further supports the utility of radiographs in oral health care.

   Denturists are well-positioned to adopt these advancements with additional training. Digital radiography not only enhances accuracy but also reduces the environmental impact associated with conventional film processing.

Safety of X-Rays and Ionizing Radiation in the Dental Context

The use of ionizing radiation in Dentistry is a well-established practice, essential for diagnostic accuracy and effective treatment planning. However, the risks of radiation exposure must be carefully balanced against its utility, ensuring that radiographs are only used when the benefits outweigh potential harms. In alignment with this principle, modern advancements in radiographic technology and updated regulatory recommendations have significantly enhanced the safety of dental radiographs, reducing the amount of ionizing radiation required, and providing reassurance to both practitioners and patients.

Dental radiographs involve highly specific and localized use of ionizing radiation, focused exclusively on the jaw and oral cavity. Unlike other medical applications, dental radiographs use low doses of radiation delivered in short durations with precise beam targeting. This ensures that the exposure is minimal and confined to the area requiring imaging. Such advancements underscore the safety of radiographs in the dental context, particularly when used appropriately and within regulated guidelines.

Recommendations from the 2016 MORPL Report

The *2016 Report and Recommendations on Modernizing Ontario's Radiation Protection Legislation* (MORPL) identified the need to update regulations surrounding radiation use to reflect current technologies and public health needs. This recognition aligns with the proposal to update Denturists' scope of practice to include radiographic imaging. By updating legislative frameworks, Ontario can ensure that radiographs are used effectively and safely, maximizing their benefits while minimizing risks to patients.

Advancements in Digital Radiography

Recent advancements in digital radiographic equipment have further enhanced safety and efficiency. The *Journal of the American Dental Association* (JADA), supported by medical physicists from the U.S. Food and Drug Administration, reviewed nearly 100 studies and concluded that modern digital imaging technologies significantly reduce unnecessary radiation exposure. These technologies allow

practitioners to restrict the beam size to the precise area of interest, reducing scatter radiation and protecting other parts of the body.

The shift from conventional film to digital radiography has also improved precision and patient safety. Digital imaging eliminates the need for repeated exposures due to errors, enhances image quality, and enables better visualization of dental and bone structures, supporting more accurate treatment planning. Additionally, it reduces environmental impact by eliminating chemical processing.

Updated Guidelines for Radiation Protection

As of February 1, 2024, the American Dental Association (ADA) no longer recommends the routine use of thyroid collars (radiation protection aprons) during radiographic exams. This change reflects evidence that modern equipment and techniques, such as digital imaging and beam restriction, provide sufficient protection. This updated recommendation applies universally, including vulnerable populations such as pregnant patients and children, reinforcing the safety of contemporary dental radiography practices.

This recommendation aligns with international best practices and ensures that patient safety remains paramount. Denturists, as trained oral health professionals, are well-positioned to integrate radiographic imaging into their practices, provided they adhere to established safety protocols and complete the necessary certification.

Radiographic Training and Competency Standards

Denturists in Ontario are uniquely restricted among patient-facing oral health professionals from prescribing, taking, processing, and interpreting radiographs (Dentists, Dental Assistants, and Dental Hygienists all have some combination of radiographic capabilities). This is especially highlighted by the fact that Denturists were permitted to operate independently and open denture clinics decades before Dental Hygienists were permitted to operate independently from dental clinics.

A comparison between the radiographic curricula of Denturism with that of Dental Hygiene or Dental Assisting across post-secondary institutions (i.e., George Brown, Georgian, Oxford) demonstrates that Denturists **possess** identical competencies of their counterparts:

- Principles and application of radiography
- Recognition and identification of anatomical landmarks on intra-oral or extra-oral radiographs
- Client/Patient management
- Abnormal or pathological oral health conditions
- Practical experience through interpretation of radiographs

Denturists currently **lack** the following competencies:

- Applications of intra-oral radiographic techniques
- Quality Assurance procedures
- Processing dental radiographs
- Integrating radiographs and imaging into the Denturism process of care

- Trouble shooting radiographic equipment
- Practical or clinical experience in a radiography clinic and placement of sensors

To address these gaps, Denturists would undergo further continuing education (i.e., Healing Arts Radiation Protection [HARP] certification):

1. **Continuing Education Programs**: Courses focusing on radiographic techniques, safety protocols, and regulatory compliance.
2. **HARP Certification**: Mandatory certification to ensure Denturists meet the technical and safety requirements for radiographic procedures.
3. **Clinical Training**: Hands-on experience in radiographic imaging and implant-related procedures to develop practical competencies.

Education Before Regulations

To ensure readiness for these changes, the College of Denturists of Ontario and associated stakeholders have outlined a structured approach centered on education, professional development, and regulatory compliance.

A phased implementation of radiographic capabilities emphasizes updating educational curriculums at post-secondary institutions like George Brown College, Georgian College, and Oxford College. These institutions currently offer Dental Hygiene and Dental Assisting programs that include HARP (Healing Arts Radiation Protection) certification as part of their curriculums. The readiness, willingness, and ease of these institutions to revise the Denturism program curricula to include HARP certification ensures a seamless transition for new graduates into expanded practice capabilities.

Additionally, for practicing Denturists, the institutions have indicated their capacity to offer continuing education workshops and short courses to upgrade credentials. These programs would allow current professionals to meet the HARP certification requirements, thus ensuring uniform competency across the profession. This proactive approach prioritizes patient safety and equips Denturists with the necessary knowledge and skills to perform radiographic imaging effectively.

Professional Development and Continuing Education

The Denturist Association of Ontario (DAO)[6] and the Denturist Group of Ontario (DGO)[7] have taken steps to integrate radiographic training into the profession's ongoing education initiatives. Partnerships with radiology educators and industry leaders have led to the development of a dedicated radiographic training course, currently under review by the Ministry of Health. Furthermore, a comprehensive 35-hour residency program in collaboration with an implant course provider, is already available. This program equips Denturists with foundational knowledge in implant-related radiography and procedural applications, preparing them for expanded responsibilities. Continuing education conferences, trade

[6] Denturist Association of Ontario. (2024). https://Denturistassociation.ca/
[7] Denturists Group of Ontario. (2024). https://Denturistgroupofontario.com/

shows, and the publication of scientific articles further underscore the profession's commitment to ongoing learning.

5. Patient Journeys – Before and After Scope Update

A patient seeking denture care will undergo a series of dental appointments with their respective oral health professional that may include Dentists, Dental Surgeons, and Denturists all working in conjunction. For implant-supported dentures, additional appointments and surgical procedures will be required.

Depicted in the patient pathways below are the reduction in the number of back and fourth appointments between Dentists/Dental Surgeons and Denturists for the various types of denture treatment plans, some of may include:

- **Complete Dentures**: replaces all missing teeth in the upper or lower jaw. The dentures are held in place through suction/cohesion alone. The contours of the mouth and jaw create a suction seal allowing the dentures to be retained.

- **Partial Dentures**: replaces some or multiple missing teeth. Can be fabricated in various ways with different materials including metal or acrylic, or a combination of both. Dentures are held in place using clasps/attachments on nearby existing healthy teeth or can be affixed onto implants.

- **Implant-Supported Dentures:** aka implant tissue-supported overdentures, a common form of implant-supported dentures. Dentures are affixed directly onto several implants providing greater stability and retention over complete or partial dentures.

- **Bar retained Implant-Supported Dentures:** aka implant overdenture bar, a form of dentures where a metal bar is affixed onto several implants and the denture is then attached to the bar (instead of the implants directly).

1. Complete or Partial Dentures

Patient Pathway Map

CURRENT SCOPE

1. Denturist (DD) consultation
2. Dental Surgeon (DDS) consultation, examination & imaging (x-ray)
3. DD assessment of soft and hard tissues for readiness for denture fabrication (possible delay due to healing)
4. DD fabrication of dentures
5. DDS appointments for fillings / extractions / rest prep and/or Dental Surgeon referral, etc.

Complete denture with lower and upper dentures

Types of Partial Dentures

TYPE 1: Cast metal clasp removable partial dentures

TYPE 2: Acrylic clasp removable partial dentures

TYPE 3: Flexible partial denture

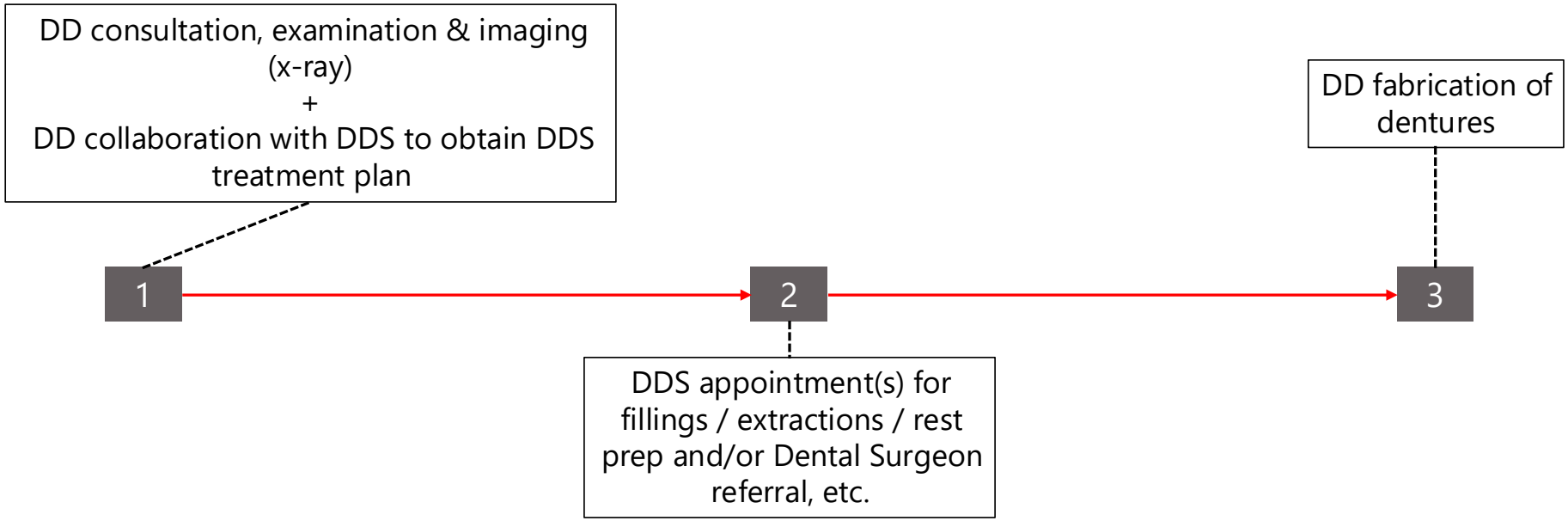
Source: Fixodent, Procter & Gamble, "Types of Partial Dentures", https://www.dentureliving.com/en -us/advice -tips/types -of-dentures/partials/types - of-partial-dentures

Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	5	3
Patient Appointments between DD and DDS	2	2

1. Complete or Partial Dentures

Patient Pathway Map

PROPOSED SCOPE



Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	5	3
Patient Appointments between DD and DDS	2	2

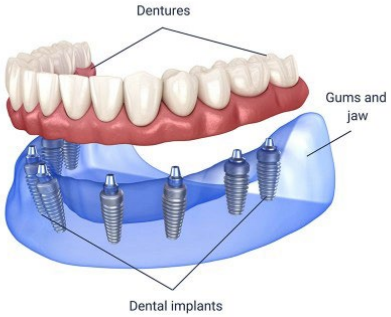
The proposed pathway highlights the time, convenience, and cost savings benefits to the public if denturists could take radiographs.

2. Implant-Supported Dentures

CURRENT SCOPE

1. DD consultation
2. DDS implant consultation
3. DDS orders imaging (x-ray / CBCT)
4. DDS surgically places implants with healing caps
5. DD adjusts / refits denture for healing caps
6. DDS verifies implant integration
7. DDS remove caps, measures for abutment height, reseats healing caps
8. DD adjust denture for abutments, take abutment level final impression
9. DDS remove caps, place / torque abutments, verify abutments seating using x-rays
10. DD bite registration, try-in
11. DD inserts final dentures
12. DDS verify dentures seating correctly on abutments using x-rays

Implant-Supported Dentures



Example of a typical implant-supported denture. Note, other forms and systems exist.

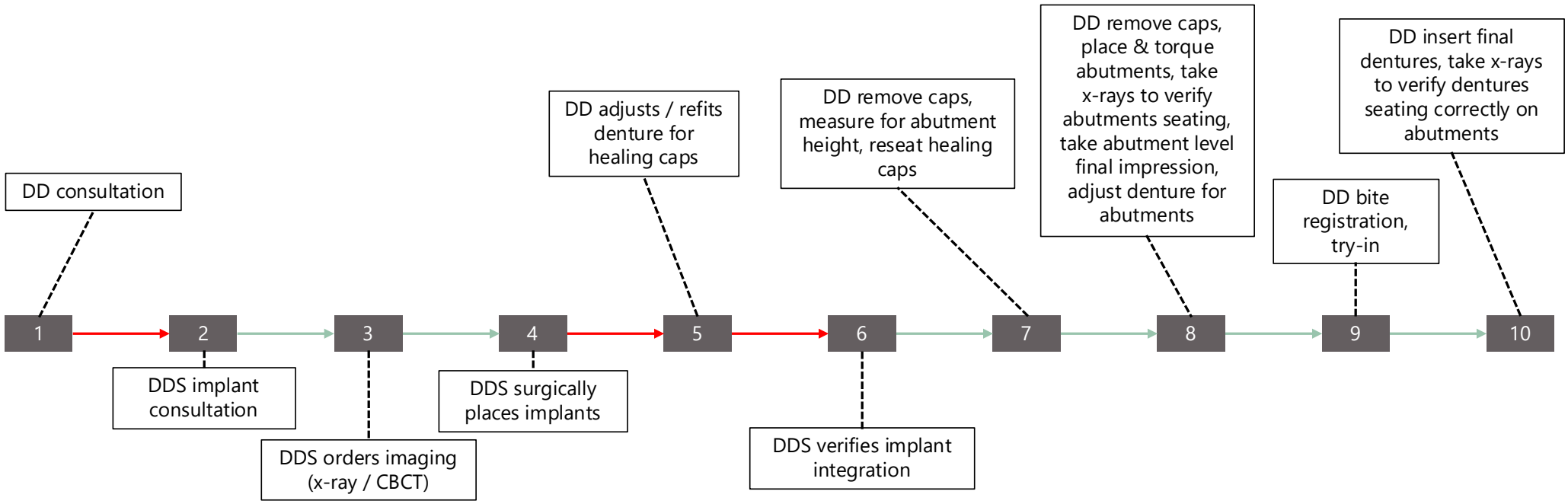
Source: Alex-Mit, iStock, "Maxillary and Mandibular prosthesis", https://www.istockphoto.com/photo/maxillary -and-mandibular-prosthesis-with-gum-all-on-8-system-supported-by-implants-gm1248129200 -363461981

Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	12	10
Patient Appointments between DD and DDS	5	3

2. Implant-Supported Dentures

Patient Pathway Map

PROPOSED SCOPE



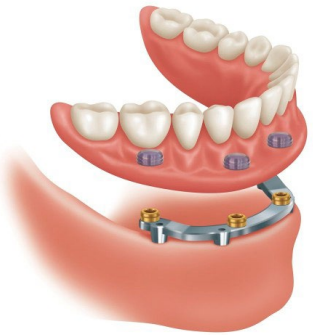
Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	12	10
Patient Appointments between DD and DDS	5	3

The proposed pathway highlights the time, convenience, and cost savings benefits to the public if denturists could remove/place implant components and order/take radiographs.

3. Bar-Retained Implant-Supported Dentures

CURRENT SCOPE

1. DD consultation
2. DDS implant consultation
3. DDS orders imaging (x-ray / CBCT)
4. DDS implant placement with healing caps
5. DD adjusts / refits denture for healing caps
6. DDS verifies implant integration
7. DDS remove healing caps, place abutment & impression copings (x-ray)
8. DD abutment level impression
9. DDS reseat healing caps
10. DD jig to verify accuracy of impression
11. DDS remove caps, seat jig (x-ray), reseat caps
12. DDS seats the bar and uses x-rays to verify proper placement
13. DD insert dentures
14. DDS verify dentures seating properly on bar using x-rays



Example of one type of bar-retained implant-supported denture system

Source: Locator, Zest Dental Solutions, 2019, Locator Attachment System, Technique Manual (Brochure).

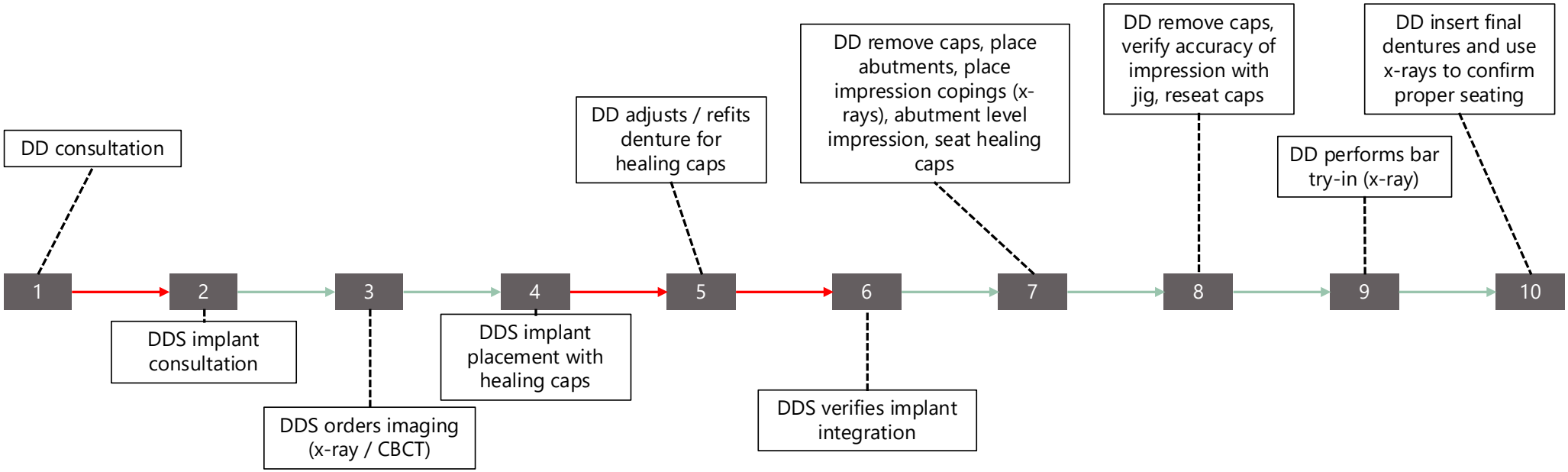
Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	14	10
Patient Appointments between DD and DDS	9	3

The current scope pathway requires a greater number of patient appointments, back and forth between the denturist and the dentist.

3. Bar-Retained Implant-Supported Dentures

Patient Pathway Map

PROPOSED SCOPE



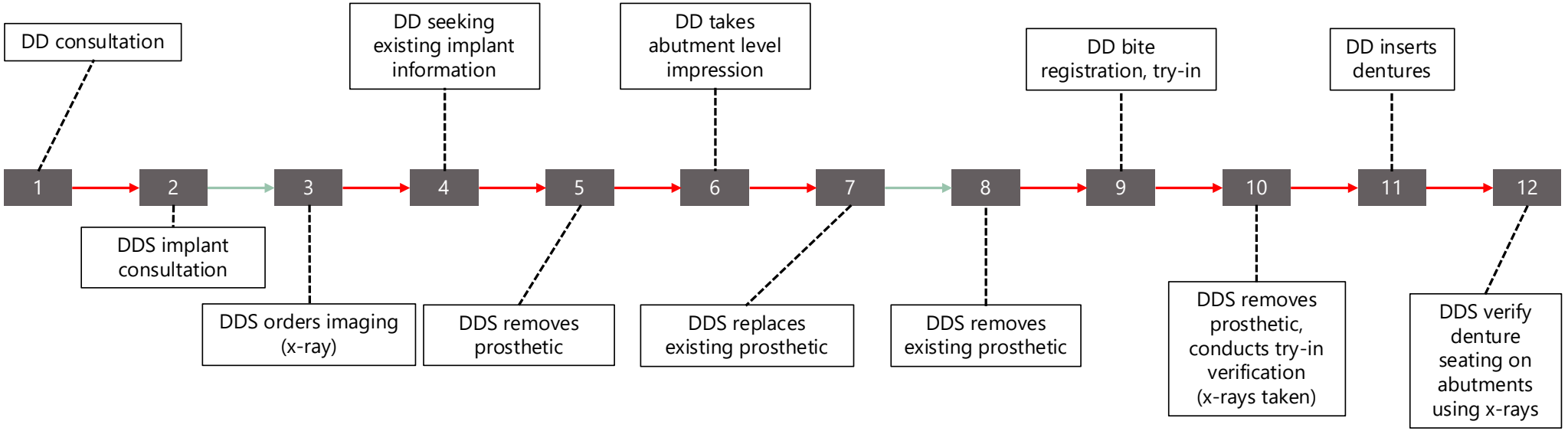
Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	14	10
Patient Appointments between DD and DDS	9	3

The proposed pathway highlights the time, convenience, and cost savings benefits to the public if denturists could remove/place implant components and order/take radiographs.

4. Existing Bar-Retained Implant-Supported Dentures

Patient Pathway Map

CURRENT SCOPE



This example is depicting a scenario where the patient already has a bar retained system in place and the dentures need to be replaced.

Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	12	5
Patient Appointments between DD and DDS	9	0

The current scope pathway requires a greater number of patient appointments, back and forth between the denturist and the dentist.

6. Costs and Cost Savings

For Patients

Updating the scope to include radiographic services and manage abutments offers significant cost-saving benefits to patients while maintaining affordability in oral health care. The proposed changes will lead to a more streamlined patient experience, reducing both direct and indirect costs associated with denture care.

1. **Lower Costs for Radiographic Services**
   Permitting Denturists to prescribe, take, and process radiographs will not increase costs for patients. In fact, the costs associated with radiographic services performed by Denturists in other jurisdictions are lower than those outlined in Dentists' fee guides. Radiographic fees are typically structured as part of a Denturist's bundled services, ensuring affordability and transparency for patients. For governmental programs, the negotiated rates for Denturists are lower than Dentist for identical services.
   A national review by the Canadian Academy of Health Sciences (CAHS, 2014) demonstrates that enabling mid-level oral health professionals to perform routine diagnostic functions–such as radiographs–improves patient access, reduces the number of appointments required for treatment, and lowers out-of-pocket costs for vulnerable and low-income populations. The CAHS report further highlights that consolidating diagnostic and prosthodontic services within a single provider reduces fragmentation and minimizes avoidable delays, particularly for seniors and individuals with mobility challenges. These findings support the conclusion that authorizing Denturists to perform radiographs would provide measurable cost and time savings for patients while improving continuity of care..[8] By allowing Denturists to provide radiographic services directly, patients in Ontario will benefit from similar efficiencies.

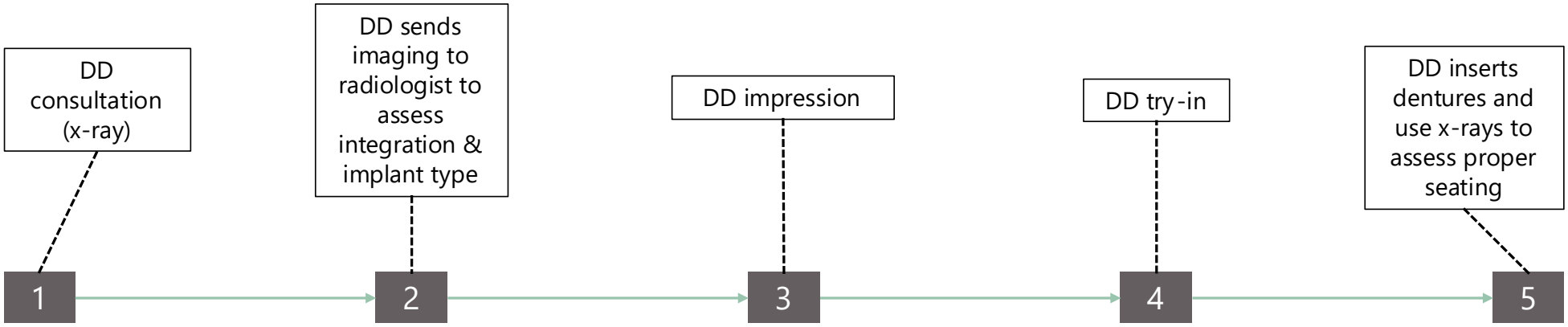
2. **Travel and Appointment Savings**
   One of the most significant cost savings stems from the elimination of redundant appointments. Currently, patients requiring radiographs must visit a Dentist for imaging before returning to a Denturist for treatment. This process incurs additional travel costs, lost productivity, and scheduling complexities. Allowing Denturists to perform radiographs will consolidate these appointments, reducing the time and expense required for care.

   The Financial Accountability Office of Ontario (2023) has identified that fragmented care pathways requiring multiple visits across different providers significantly increase patient time costs, travel burden, and missed work hours. Streamlining diagnostic and treatment services into a single appointment–where clinically appropriate–has been shown to improve adherence to care plans and enhance access for rural, remote, and mobility-limited populations. Allowing

[8] **Canadian Academy of Health Sciences.** (2014). Improving Access to Oral Health Care for Vulnerable People Living in Canada.

4. Existing Bar-Retained Implant-Supported Dentures

PROPOSED SCOPE



This example is depicting a scenario where the patient already has a bar retained system in place and the dentures need to be replaced.

Number of Patient Appointments		
	Current Scope	Proposed Scope
Total Patient Appointments	12	5
Patient Appointments between DD and DDS	9	0

The proposed pathway highlights the time, convenience, and cost savings benefits to the public if denturists could remove/place implant components and order/take radiographs.

Denturists to form radiographs would eliminate redundant visits and enable patients to complete assessment and prosthodontic planning in a single, efficient encounter. .[9] For example, integrating radiographic services into Denturist-led appointments can save patients an average of two to three hours per visit, as well as associated transportation costs. For rural residents or those with mobility issues, these savings are even more pronounced.

3. **No Additional Costs for Implant Services**
   The proposed changes regarding implant components will not introduce new costs to patients. These procedures, which involve fitting and adjusting components to ensure proper denture function all are factored into the cost of the denture treatment plan. The fee guide for Denturists is materially lower than the fee guide for Dentists/Dental Surgeons for identical procedures.

   This billing model ensures patients experience no unexpected financial burdens, while also avoiding the need to schedule separate appointments with Dentists for minor implant-related adjustments. This approach enhances convenience for patients, particularly seniors and those with limited financial means.

For Denturists

Updating the scope of practice for Denturists in Ontario to include radiographic services and implant-related procedures presents a range of benefits for health care providers, particularly in terms of efficiency and resource utilization. These changes will result in cost-neutral or cost-saving impacts for the broader oral health care team while enabling Denturists to bear responsibility for necessary investments.

1. **Promoting Efficiency in Oral Health Care Delivery**
   Permitting Denturists to prescribe and process radiographs will streamline workflows within dental clinics and independent Denturist practices. By transferring routine imaging responsibilities to Denturists, Dentists and Dental Surgeons can focus on more complex oral health procedures, thereby improving their productivity and patient throughput.

   A scoping review published in **BMC Oral Health** (Yuan et al., 2020) found that reallocating routine diagnostic tasks – such as radiographic imaging–from Dentists to appropriately trained mid-level oral health providers improves workflow efficiency, increases provider productivity,

[9] Financial Accountability Office of Ontario. (2023). *Access to Health Care Services in Ontario*. Government of Ontario.

and reduces bottlenecks in clinical settings. [10] Similar outcomes are anticipated in Ontario, where Dentists and Dental Surgeons will have additional capacity to address intricate surgical or restorative cases, resulting in more efficient clinic operations.

2. Costs of Implementation for Denturists

While Denturists will incur certain costs to implement radiographic capabilities, these expenses are manageable and discretionary. Key costs include:

- **Upskilling for HARP Certification:** Denturists will need to complete training and certification to meet the standards of the Healing Arts Radiation Protection (HARP) Act. Many Denturism colleges already offer accelerated programs to support this transition.

- **Equipment and Clinic Updates:** The initial purchase and maintenance of radiographic equipment and clinic modifications to comply with HARP standards represent capital investments. However, these costs are borne by the individual Denturist and do not impact other members of the health care team.

  According to national health-system analyses conducted by the Canadian Academy of Health Sciences (CAHS, 2014) and the Canadian Institute for Health Information (CIHI, 2019), jurisdictions that expand the responsibilities of mid-level oral health providers report improved patient flow, increased clinic efficiency, and faster recoupment of capital investments through higher patient throughput and reduced appointment duplication.[11]

For Other Providers

The proposal will not impose additional costs on dental clinics or the oral health team as a whole. Radiographic services and related expenses are managed independently by Denturists, ensuring that Dentists, Dental Hygienists, and other providers are not financially impacted. Instead, the increased efficiency of care pathways will reduce overall administrative and referral burdens, indirectly benefiting all members of the oral health ecosystem.

The proposed scope of practice expansion for Denturists will result in cost savings and efficiency gains for health care providers, with Denturists independently managing implementation costs. These changes will optimize the use of health care resources, allowing Dentists and Dental Surgeons to dedicate more time to complex cases while enhancing overall patient care delivery.

---

[10] Yuan J., et al. (2020). *Task shifting in oral health care: A scoping review*. BMC Oral Health, 20(1)..[11] **Canadian Academy of Health Sciences**. (2014). *Improving Access to Oral Health Care for Vulnerable People Living in Canada*.

[11] **Canadian Academy of Health Sciences**. (2014). *Improving Access to Oral Health Care for Vulnerable People Living in Canada*.

For Governmental Programs

The proposed expansion of Denturists' scope of practice offers significant intergovernmental cost savings and efficiency gains. By reducing redundancies in service delivery, lowering costs for equivalent services, and improving access to oral health care, the proposal aligns with the province's health care priorities and creates systemic financial benefits.

1. Cost Savings Through Lower Fee Guides

The fee guide for Denturists, including radiographs, is lower than that of Dentists and Dental Surgeons. For government-funded programs such as the Canadian Dental Care Plan (CDCP) and the Ontario Seniors Dental Care Program (OSDCP), these lower fees translate to direct cost savings for identical services. A comparison of publicly available fee schedules–**the Ontario Dental Association (ODA) Suggested Fee Guide (2024)** and the **Denturist Association of Ontario (DAO) Fee Guide (2024)**–shows that Denturists charge materially lower fees for comparable radiographic and denture-related services. Differences often range from 20 to 35%, representing a meaningful cost advantage for publicly funded dental programs. For example:

A radiograph performed by a Dentist may cost $50–$80 per image for the CDCP, whereas Denturists can offer the same service at a significantly lower rate under existing fee schedules.

By increasing access to Denturists' services, these cost advantages can be realized on a larger scale, particularly for vulnerable populations covered by public programs.

2. Reduced Appointment Redundancies

Currently, edentulous patients often require multiple appointments with both Dentists and Denturists for procedures such as radiographs and implant component adjustments. Each additional Dentist appointment, including those for x-rays or final denture fittings, represents a separate cost to government programs. Allowing Denturists to prescribe and process radiographs, as well as manage implant abutments, consolidates these services into fewer visits, reducing administrative costs and eliminating redundant claims.

International benchmarking by the **Organisation for Economic Co-operation and Development (OECD, 2021)** shows that health systems permitting mid-level oral health providers to undertake routine diagnostics experience lower per-patient costs and reduced appointment duplication. OECD analyses further conclude that expanding scopes of practice–when supported by appropriate training–results in more efficient use of specialist time.[12] Similar outcomes are anticipated in Ontario, where current inefficiencies create avoidable expenses for public payers.

3. Indirect Savings Across Government Programs

[12] **OECD. (2021).** Health at a Glance 2021: OECD Indicators – Oral Health.

Updating the scope of practice also generates indirect savings across other government sectors by improving access to affordable oral health care. Malnutrition and systemic health issues linked to untreated edentulism can result in higher demand for emergency care, long-term care, and social services. Improved access to denturism care reduces these risks, alleviating strain on primary care providers and emergency departments.

According to the **Canadian Institute for Health Information (CIHI, 2019)**, residents of rural and remote communities face disproportionately high barriers to accessing oral health services, including limited provider availability and the need to travel considerable distances for routine diagnostic imaging. CIHI reports that consolidating diagnostic and treatment services–particularly in denture care–leads to earlier intervention and fewer preventable emergency visits..[13] These outcomes translate to reduced costs for long-term care programs and fewer hospitalizations linked to preventable oral health conditions.

The proposed scope update offers significant cost savings for government programs, driven by lower fee guides, reduced appointment redundancies, and improved health outcomes. By enhancing access to affordable oral health care, the proposal reduces direct expenditures on oral health services and indirect costs across health care, social services, and long-term care sectors, supporting Ontario's commitment to equitable and efficient health care delivery.

7. Jurisdictional Comparison

A jurisdictional comparison was conducted to find jurisdictions most similar to Ontario in terms of regulatory framework, legislation, entry-to-practice examinations, clearly delineated scopes of practice, and whether the profession of Denturism exists. In certain states in the United States of America, the role and function of a Denturist is not currently recognized as a distinct profession. Accordingly, the scope of a Denturist in those jurisdictions fall under the responsibilities of Dentists or Dental Surgeons.

Ontario, Alberta, and Quebec are unique in having established Canadian denturism educational institutions, standalone regulatory bodies, and robust licensing frameworks. However, while Alberta and Quebec have updated their regulations, in 2002 and 2020 respectively, to reflect advancements in dental implant technology, Ontario lags behind. This regulatory disparity also affects labour mobility due to the difference in scopes of practice.

Alberta and Quebec offer a model for modernizing Ontario's legislative framework. These provinces, along with the United Kingdom, have recognized the importance of Denturists' role in implant-supported dentures, granting them the authority to affix implant-supported dentures. These regulatory

[13] **Canadian Institute for Health** Information. (2019). *Access to Oral Health Care in Canada – Rural and Remote Populations.*

updates have improved care delivery by enabling Denturists to work collaboratively with Dentists and Dental Surgeons, ensuring patients receive timely, high-quality care.

Alberta's Scope of Practice for Denturists

Alberta's scope of practice for Denturists, as outlined in the *Health Professions Act*, allows Denturists to perform a broad range of procedures that enhance their ability to provide comprehensive oral health care. The key provisions include:

Permitted Activities:

1. Prescribe or fit:
    - Removable partial or complete dentures.
    - Fixed or removable implant-supported prostheses replacing two or more teeth.
2. Perform invasive procedures on body tissue below the mucous membrane or within/below the surface of teeth, provided these do not alter natural dentition.
3. Insert and remove instruments, devices, and fingers into artificial openings of the mouth.
4. Reduce a dislocation or subluxation of the temporomandibular joint.
5. Order ionizing radiation for medical radiography.

These provisions extend beyond the scope proposed in Ontario, particularly in allowing Denturists to fit dental bridges or crowns replacing two or more teeth. While these services are not considered dentures, Alberta recognizes Denturists as oral health professionals equipped to replace missing teeth with the most appropriate prosthetic solution, such as dentures, multi-tooth crowns, or bridges. However, the replacement of a single tooth remains under the purview of Dentists.

- **Interpretation of Restricted Activities:** Alberta's *Health Professions Act* defines restricted activities as those that "cut body tissue, administer anything by an invasive procedure, or perform surgical or other invasive procedures on body tissue (i) below the dermis or mucous membrane, or (ii) in or below the surface of teeth." Importantly, this definition does not consider the placement of dentures over implants on metal-to-metal contact as invasive, permitting Denturists to perform these procedures.

This interpretation contrasts with Ontario's *Regulated Health Professions Act* (RHPA), which uses the phrase "below the surface of a mucous membrane" or "removable dentures" to delineate controlled acts. This language leaves less room for interpretation, potentially necessitating regulatory changes to allow Denturists to affix or replace implant components. In Alberta, such procedures are explicitly deemed non-invasive, facilitating Denturists' ability to provide implant-supported dentures efficiently.

Quebec's Scope of Practice for Denturists

In Quebec, collaborative efforts between the *Ordre des denturologistes du Québec* (ODQ) and the *Ordre des Dentistes du Québec* (ODQ-D) resulted in an expanded scope of practice for Denturists around 2020. Key updates include:

- **Permitted Activities:**
    1. Contributing to the determination of implantology treatment plans.
    2. Performing non-invasive procedures for the design, installation, and adjustment of implant-supported prostheses (excluding sealed prostheses), with the required training certificate issued by the regulatory body.
    3. Removing and replacing healing plugs and placing abutments on implant heads, as per a prescription and with appropriate certification.
    4. Designing, manufacturing, and selling mouthguards.
    5. Selling dental prostheses, excluding sealed dental prostheses.

- **Quebec Addressed Legislative Technicalities:** The regulators for Denturism and Dentistry in Quebec specifically addressed the legislative technicality regarding invasive vs. non-invasive procedures and the implications regarding implant supported dentures. Their collaborative efforts provided clarity on permitted activities including the design, installation, and adjustment of implant supported dentures and the removal/replacement of denture related implant components. This proposal seeks to remedy the identical issue that Quebec has now addressed.

- **Collaboration Between Regulators:** The collaborative efforts of the ODQ and ODQ-D ensure smooth execution of joint treatment plans for patients requiring implants and implant-supported dentures. To facilitate this, the regulators have developed standardized record-keeping forms and guidelines for both Dentists and Denturists. This cooperative model enhances communication, minimizes delays in treatment, and ensures patient outcomes are prioritized.

- **Impact on Patient Care:** The integration of Denturists into implantology treatment plans allows them to perform essential steps such as removing healing plugs and placing abutments, tasks that are otherwise delayed under restrictive scopes of practice. The availability of template treatment plans and joint record-keeping further underscores the effectiveness of interprofessional collaboration in Quebec, serving as a potential model for Ontario.

United Kingdom's Scope of Practice for Denturists (aka Clinical Dental Technicians)

The Scope of Practice for Clinical Dental Technicians statement is depicted below in figure below. The key differences between the United Kingdom and Ontario are highlighted for reference.

Clinical dental technicians (CDTs)

Clinical dental technicians are registered dental professionals who provide complete dentures direct to patients and other dental devices on prescription from a dentist. They are also qualified dental technicians.

Patients with natural teeth or implants must see a dentist before the CDT can begin treatment. CDTs refer patients to a dentist if they need a treatment plan or if the CDT is concerned about the patient's oral health.

Clinical dental technology builds on dental technology. As a CDT, you can also undertake the following if you are trained, competent and indemnified:

- prescribe and provide complete dentures direct to patients
- provide and fit other dental devices on prescription from a dentist
- take detailed dental history and relevant medical history
- perform technical and clinical procedures related to providing removable dental appliances
- carry out clinical examinations within their scope of practice
- take and process radiographs and other images related to providing removable dental appliances
- distinguish between normal and abnormal consequences of ageing
- give appropriate patient advice
- recognise abnormal oral mucosa and related underlying structures and refer patients to other healthcare professionals if necessary
- fit removable appliances
- provide sports mouth guards
- keep full, accurate and contemporaneous patient records
- vary the detail but not the direction of a prescription according to patient needs

Additional skills which CDTs could develop include:

- oral health education
- re-cementing crowns with temporary cement
- providing anti-snoring devices on prescription of a dentist
- removing sutures after the wound has been checked by a dentist
- prescribing radiographs
- replacing implant abutments for removable dental appliances on prescription from a dentist
- providing tooth whitening treatments on prescription from a dentist

All other skills are reserved to dental hygienists, dental therapists, orthodontic therapists or dentists.

Figure 3: General Dental Council's Scope of Practice Document, Effective September 30, 2013.

Key Observations from the Jurisdictional Scan

1. **Broader Scope of Practice in Alberta:** Alberta's legislation enables Denturists to perform advanced procedures, such as fitting dental bridges and crowns for two or more missing teeth. This positions Denturists as versatile oral health professionals capable of offering comprehensive solutions tailored to patients' needs, including implant-supported prostheses. Alberta's distinction that non-invasive metal-to-metal implant procedures do not fall under restricted activities contrasts with Ontario's stricter regulatory interpretation, necessitating potential reforms to align practices.

2. **Collaborative Approach in Quebec:** Quebec emphasizes interprofessional collaboration between Dentists and Denturists, particularly for implant-supported dentures. The shared treatment plan and record-keeping frameworks developed collaboratively by the *Ordre des denturologistes du Québec* and *Ordre des Dentistes du Québec* enhance efficiency, streamline communication, and improve patient outcomes. This model provides a strong foundation for potential adoption in Ontario.

3. **Expanded Roles in the United Kingdom:** The United Kingdom recognizes Denturists as Clinical Dental Technicians (CDTs), with an expanded scope that includes prescribing and providing complete dentures directly to patients and performing technical and clinical procedures related to removable dental appliances. As shown in Figure 2, CDTs in the UK may:

    - Take and process radiographs related to removable dental appliances.
    - Remove sutures after the wound has been checked by a Dentist.
    - Replace implant abutments for removable dental appliances on a Dentist's prescription.
    - Develop additional skills, such as re-cementing crowns with temporary cement and providing anti-snoring devices under a Dentist's direction.

    The UK's model demonstrates a significant integration of CDTs into the broader oral health team, allowing them to address a wider range of patient needs independently or collaboratively with Dentists. This approach reduces redundancies and enhances service delivery. In contrast, Ontario's restrictions on Denturists' scope limit their ability to provide such comprehensive care, particularly in areas like radiographs and implant abutments.

4. **Regulatory Differences in Ontario:** Ontario's *Regulated Health Professions Act* imposes stricter interpretations of invasive procedures, particularly regarding mucous membrane penetration. This limits Denturists' ability to perform implant-related tasks, even when non-invasive. Adopting practices from Alberta, Quebec, and the UK—such as classifying implant abutment procedures as non-invasive or introducing additional training certifications—could modernize Ontario's framework while maintaining patient safety.

Jurisdictional Scan - Further Resources

- Government of Alberta. (2024, June 21). *Health Professions Act*. https://kings-printer.alberta.ca/documents/Acts/h07.pdf
- Government of Alberta. *Denturists Profession Regulation*. Denturists-Profession-Regulation-March-31-2023.pdf
- College of Alberta Denturists' Standards of Practice Standards-of-Practice-January-1-2023.pdf
- Legis Quebec. (2024, May 31). D-4 Denturologists Act. https://www.legisquebec.gouv.qc.ca/en/document/cs/D-4
- Code des professions, RLRQ c C-26. https://www.canlii.org/fr/qc/legis/lois/rlrq-c-c-26/derniere/rlrq-c-c-26.html
- Click here to learn more about the Ordre des denturologistes du Quebec and their templated forms.
- General Dental Council's Scope of Practice Document, Effective September 30, 2023 Layout 1

8. Impacts for Specific Patient Populations

The proposed scope update will have significant positive impacts on specific populations, addressing barriers to oral health care access, and improving patient outcomes.

Populations with Accessibility and Mobility Issues, Including Aging Populations

Ontario's aging population is growing rapidly, with the number of seniors projected to rise to 4.4 million by 2046[14]. This demographic frequently faces mobility challenges, financial constraints, and other barriers to accessing oral health care services. For individuals who rely on caregivers or transportation assistance, multiple appointments with both Dentists and Denturists can be physically, emotionally, and financially burdensome.

The proposed changes will streamline patient care pathways by reducing the need for back-and-forth visits between Denturists and Dentists. By allowing Denturists to conduct radiographs and handle implant abutments independently, these patients could avoid at least four to six additional appointments, depending on the procedure. This reduction would minimize travel time, effort, and associated expenses, particularly for seniors and those with limited mobility.

Further, the proposal ensures that seniors can access timely care without navigating between multiple health care providers. With Denturists operating at an updated scope, oral health care delivery becomes more patient-centric and aligns with the Ministry's goal of providing the right care in the right place. The ability to address oral health issues related to edentulism promptly will reduce the likelihood of complications such as infections, poor nutrition, and diminished quality of life, all of which disproportionately affect aging populations.

Rural, Remote, and Northern Community Populations

In rural, remote, and northern communities, access to oral health care is a persistent challenge due to a scarcity of providers and the geographic distances patients must travel. Dentists are often concentrated in urban centers, leaving rural residents reliant on limited dental services. For these populations, the proposed changes will provide significant benefits.

By enabling Denturists to conduct radiographs and work on implant-supported dentures directly, patients in these regions will experience fewer delays in receiving care. The current model, which requires back-and-forth referrals between Denturists and Dentists, is particularly burdensome for individuals in remote areas. Fly-in-fly-out communities face amplified challenges, as the logistical and financial burden of repeated travel to urban centers can delay necessary treatment, leading to worsened outcomes.

An updated scope will facilitate faster initiation of treatment, improving both oral health and denture care quality. For instance, radiographs taken at a denture clinics will provide immediate information,

[14] Government of Ontario. *Ontario's Long-Term Report on the Economy 2024. Chart 1.20: Growth and Aging of the Population Aged 65+ in Ontario.* (2024)

reducing the need for referrals to distant dental offices. Similarly, allowing Denturists to adjust or replace implant abutments will ensure patients receive timely care without traveling long distances. These changes will significantly improve the oral health care experience for rural and northern populations and reduce disparities in care delivery across Ontario.

First Nations, Inuit, and Métis Populations

Indigenous populations face unique challenges in accessing oral health care, including financial barriers, geographic isolation, and limited availability of culturally appropriate care. Many individuals in these communities rely on the Non-Insured Health Benefits (NIHB) program to cover dental services, which often requires a pre-determination process that includes radiographic evidence to approve partial denture treatments.

By empowering Denturists to take radiographs, the proposal will expedite the pre-determination process for NIHB-covered treatments. Currently, patients must wait for radiographs to be taken by Dentists, leading to unnecessary delays in treatment approval. Denturists' ability to perform this service directly will ensure faster submission of required documentation, reducing waiting times and improving access to care. As the CDCP program is modelled after the NIHB, radiographs are also required for the pre-determination process.

Moreover, the updated scope will enhance the overall quality of denture care for First Nations and Inuit patients by addressing their needs more efficiently within their local communities. This is particularly critical in remote and isolated areas where access to Dentists is limited. With Denturists able to provide more comprehensive care, including radiographs and implant-supported denture adjustments, these populations will benefit from improved oral health outcomes, reduced treatment delays, and enhanced accessibility to necessary services.

Newcomers and Refugees

The federal government, despite reducing immigration targets slightly for 2025, still aims to welcome 465,000 newcomers in 2024 and 485,000 in 2025 (Immigration, Refugees and Citizenship Canada, 2024). Many of these individuals will settle in Ontario, contributing to the province's workforce and cultural diversity while increasing demand for health care services, including oral health care.

Newcomers or refugees often face barriers to accessing oral health services due to financial constraints, language barriers, and unfamiliarity with the health care system.[15] These barriers are particularly pronounced in underserved communities, where dental professionals are scarce. Denturists are uniquely positioned to address these challenges by offering affordable, patient-centered services. Updating their scope to include radiography and implant-related procedures would further enhance their ability to meet the oral health needs of newcomers efficiently and comprehensively.

[15] Calvasina, P., Muntaner, C. & Quiñonez, C. Factors associated with unmet dental care needs in Canadian immigrants: an analysis of the longitudinal survey of immigrants to Canada. *BMC Oral Health* **14**, 145 (2014)

9. Risks

Public Safety Risks

From a public safety perspective, there is no evidence to suggest that the proposed changes would increase risks to public safety. A review of disciplinary decisions in Alberta, Quebec, and the United Kingdom revealed no cases of professional misconduct related to radiographs or implant abutments. Furthermore, the changes fall within the existing regulatory framework, which mandates strict standards of practice and oversight by the College of Denturists of Ontario.

Risks to Other Regulated Health Professions

There are no anticipated risks to other regulated health professions. This proposal fosters interprofessional collaboration by optimizing the roles of each oral health care team member, unlocking additional capacity, and ensuring that every professional operates at their full scope to enhance patient care and system efficiency.

Risks to Integrated Care

There are no anticipated risks to integrated care associated with this proposal. On the contrary, updating the scope of practice for Denturists will enhance integrated care by reducing barriers to treatment, streamlining patient pathways, and fostering seamless collaboration between Denturists and Dentists/Dental Surgeons. This improved coordination will optimize the roles of oral health professionals, leading to better patient outcomes and more efficient care delivery.

Risks to Health Care Service Delivery Partners or Ontario Businesses

There are no anticipated risks to health care service delivery partners or Ontario businesses associated with this proposal. The proposed changes are expected to enhance the efficiency of service delivery by optimizing the roles of Denturists within the oral health care team, while maintaining alignment with existing regulatory frameworks. This will support, rather than disrupt, health care operations and Ontario businesses, fostering improved access to care and system-wide benefits.

10. Implementation Considerations

Should the Government of Ontario and the Ministry of Health support the proposed scope of practice update for Denturists, a coordinated implementation plan will be critical to ensure successful adoption. The plan involves system partner collaboration among the College of Denturists of Ontario, the Working Group, Denturism Associations, and educational institutions offering Denturism programs.

Below is a robust chronological outline of the steps required for consultation and implementation.

Step 1: Leadership and Stakeholder Engagement
The Scope of Practice Working Group will lead the implementation process by engaging stakeholders and facilitating coordination among the relevant parties:

- Conduct outreach to Denturism Associations, educational institutions, and other oral health stakeholders to define roles and responsibilities.
- Develop a comprehensive communications strategy to inform Denturists, patients, and collaborating professions, such as Dentists/Dental Surgeons, about the scope changes and their implications.

Step 2: Development of Standards and Guidelines
The College of Denturists of Ontario will draft and adopt new Standards of Practice and accompanying guidelines to govern the updated scope of practice. This includes:

- Defining minimum expectations for Denturists working collaboratively with Dentists/Dental Surgeons on implant abutments.
- Establishing clear guidelines for prescribing, taking, and processing radiographs within Denturists' competencies.
- Mapping and updating core competencies for Denturists at the provincial and national levels to reflect these changes.

Simultaneously, the College will:

- Update its *Jurisprudence Handbook* and *Jurisprudence Program* to align with the updated scope.
- Update the Objective Structured Clinical Examination (OSCE) component of the Qualifying Examinations to assess new competencies related to radiography and implant abutments.

Step 3: Educational Curriculum Updates
Educational institutions offering Denturism programs will update their curricula to include HARP certification training. These updates will involve:

- Drawing upon existing Dental Hygiene and Dental Assisting curricula for radiographic training.
- Securing curriculum approvals through relevant College committees.
- Informing Accreditation Canada about updates to the program and ensuring compliance with accreditation standards.

- Collaborating with the College of Denturists of Ontario and Denturism Associations to provide opportunities for currently registered Denturists to obtain HARP certification through continuing education programs.

Step 4: Continuing Education and Professional Development
Denturism Associations will play a key role in ensuring that all practicing Denturists have access to upskilling opportunities:

- Activate agreements with prospective HARP certification providers to deliver continuing education and professional development programs.
- Liaise with provincial counterparts to raise awareness of the changes among stakeholders and the public.
- Collaborate with the Government of Ontario and Health Canada to update public dental programs such as the Ontario Seniors Dental Care Program and the Canadian Dental Care Plan to reflect the new scope of practice.

Step 5: Internal Training and System Updates
The College of Denturists of Ontario will ensure its internal systems and staff are fully equipped to support the changes:

- Train internal staff, including the practice advisory service, to provide guidance on the new scope of practice and related standards.
- Upgrade the Public Register and Member Portal to reflect new competencies and HARP certification status.

Step 6: Public and Stakeholder Communication
A comprehensive communication strategy will ensure smooth adoption of the changes:

- Develop marketing and "PSA-type" content for Denturists, Dentists and other stakeholders to explain the updated scope of practice and its benefits while assuaging any perceived concerns.
- Disseminate the updated competency profile and standards of practice to regulatory and professional stakeholders.

Step 7: Monitoring and Evaluation
To ensure ongoing quality and safety following the implementation of the expanded scope of practice, a robust system of monitoring and evaluating the changes will be established to ensure public safety and the effectiveness of the updated scope:

- Collect feedback from practicing Denturists, educational institutions, Denturism Associations, and patients to identify any challenges or gaps in implementation.
- Monitor patient outcomes and stakeholder satisfaction to assess the impact of the expanded scope on access to care and interprofessional collaboration.

The College will employ self-reporting surveys and reporting mechanisms to collect feedback from Denturists, Denturism Associations, educational institutions, and other stakeholders. This feedback will provide valuable insights into the practical challenges and successes of the expanded scope and guide further refinements to implementation strategies.

The Quality Assurance Program will play a central role in ongoing monitoring. Peer and Practice Assessors will conduct in-person clinic assessments, providing direct feedback to the Quality Assurance Committee on the application of the new scope in practice. Regular reviews of standards of practice, guidelines, and training requirements will ensure that all elements remain current and aligned with patient safety priorities.

The College's leadership team will meet regularly with key stakeholders, including educational institutions and professional associations, to evaluate the effectiveness of the changes and address emerging issues. Council will receive quarterly updates on monitoring outcomes, ensuring transparent oversight and accountability.

By maintaining open lines of communication, leveraging a robust Quality Assurance framework, and incorporating evidence-based feedback, the CDO will ensure that the expanded scope of practice enhances patient care while safeguarding public safety.

11. Alignment with Health Care Priorities

This proposal aligns directly with the priorities of the Government of Canada, the Government of Ontario, and Ontario Minister of Health's plan for Connected and Convenient Care.

Canadian Dental Care Plan (CDCP): Supporting National Oral Health Goals

The Canadian Dental Care Plan, launched in 2023, is a landmark federal initiative providing free dental care to uninsured Canadians with household incomes below $90,000. As of September 2024, nearly 650,000 Canadians had accessed care under the program, with over 1 million dental procedures completed.[16] The CDCP focuses on reducing financial barriers, particularly for low- and middle-income families, children, seniors, and individuals with disabilities. The plan's success demonstrates the high demand for accessible oral health services across Canada.

Updating the scope directly supports the goals of the CDCP by increasing the availability of cost-effective denture and oral health services. Currently, gaps in the scope of practice create inefficiencies in care delivery, requiring patients to navigate multiple appointments with different providers. Authorizing Denturists to prescribe and process radiographs, manage implant abutments, and make direct referrals would streamline care pathways, enabling patients to access comprehensive services during a single visit. This approach not only reduces administrative overhead but also lowers overall costs for the CDCP, as Denturists' fees are lower than those of Dentists for identical services as negotiated in the respective fee guides. For taxpayers, this represents a more efficient allocation of federal funding while maintaining high standards of care.

Ontario Seniors Dental Care Program (OSDCP): Addressing Aging Populations' Needs

The Ontario Seniors Dental Care Program was established in 2019 to provide free dental care to low-income seniors. With the population of seniors aged 75 and older expected to grow by nearly 50% over

[16] Government of Canada, 2024

the next decade, the demand for services under the OSDCP is anticipated to rise significantly. The program offers preventive and restorative dental care, including dentures, which are critical for maintaining the health and quality of life of seniors.

The proposed scope update aligns closely with the objectives of the OSDCP by increasing the capacity of the oral health system to serve seniors efficiently and cost-effectively. Denturists are already key providers of denture care, but the current restrictions on their scope limit their ability to fully address the needs of this growing population. By enabling Denturists to perform radiographs and manage implant abutments, seniors would benefit from more integrated and streamlined care. For example, Denturists could address denture-related complications without requiring additional appointments with Dentists, reducing wait times and travel burdens for seniors.

From a cost perspective, empowering Denturists to perform these additional functions would lower program expenses. The fees associated with radiography and implant abutment management by Denturists are lower than those charged by Dentists, resulting in net savings for the OSDCP. These savings could be reinvested to expand the program's reach, ensuring more seniors receive the care they need.

Current Ontario Examples of Expanded Scopes of Practice

Ontario's commitment to expanding scopes of practice continues to drive systemic improvements. Recent initiatives have focused on empowering regulated health professionals to deliver more accessible and comprehensive care. For example:

1. **Pharmacists**: In 2023, the province announced further expansion to pharmacists' roles, including prescribing for minor ailments and additional vaccinations. These changes reflect the government's recognition of the value of decentralized, community-based care and the need to alleviate pressures on primary care providers.
2. **Nurse Practitioners and Registered Nurses**: Ontario has expanded the roles of nurse practitioners (NPs) and registered nurses (RNs) to enable them to perform procedures and services traditionally restricted to physicians. This includes prescribing controlled substances, ordering diagnostic imaging, and managing chronic conditions, all of which aim to reduce wait times and improve access to care.
3. **Midwives**: In May 2024, midwives were authorized to administer additional routine vaccinations (e.g. flu shots, COVID-19 vaccines, Tdap immunization); prescribe treatment for nausea, vomiting and acid reflux; and administer treatment for management of labour pain in a hospital setting.
4. **Interdisciplinary Care Models**: The province has emphasized building connected and convenient health care systems by supporting interdisciplinary teams in primary care and specialty clinics. These models encourage collaboration among diverse health professionals, ensuring patients receive coordinated, timely care.

The proposed scope update aligns with these initiatives by enhancing their ability to perform radiographs, manage implant components, and make direct referrals. These changes mirror the

incremental adjustments made for other professions, reflecting the government's broader strategy of leveraging interdisciplinary care to optimize resource utilization.

Your Health: A Plan for Connected and Convenient Care

The proposed scope of practice update for Denturists aligns directly with the Ministry of Health's *Your Health: A Plan for Connected and Convenient Care*. It reflects Ontario's health care priorities by promoting more integrated, efficient, and patient-centered care delivery, particularly for vulnerable populations. This alignment is evident through three key pillars: providing the right care in the right place, facilitating faster access to care, and supporting workforce expansion to meet growing demand.

- **Pillar One: The Right Care in the Right Place**

  The Ministry of Health emphasizes the importance of convenient, community-based care that enables patients to receive treatment when and where they need it. The proposed scope of practice update allows Denturists to consolidate denture-related services—including managing implant components and radiographic ordering and exposure—within the same facility. This ensures comprehensive care delivery under one roof, minimizing the need for patients to navigate between multiple providers.

  The Working Group's Patient Pathway Maps (attached as an appendix) highlight the inefficiencies in the current model. For instance, a patient requiring implant-supported dentures must currently visit both a Dentist for radiographs and a Denturist for denture fitting. This fragmented process is particularly burdensome for vulnerable populations, such as seniors and individuals with limited mobility. Many of these patients face logistical challenges, including arranging transportation, bridging gaps in public transit, and addressing unfounded fears about visiting Dentists. By enabling Denturists to deliver comprehensive care independently or collaboratively with Dentists, these barriers are significantly reduced.

  Additionally, the proposal supports team-based care by promoting seamless interprofessional collaboration. In cases where a joint treatment plan is needed, Denturists could work alongside Dentists in the same clinic to provide immediate follow-up care, reducing delays and improving patient outcomes. This model aligns with the government's goal of integrating health care services to ensure that patients receive the right care in the right place.

- **Pillar Two: Faster Access to Care**

  Long wait times for dental services create unnecessary stress and delays in treatment. The current system requires repeated back-and-forth visits between Dentists and Denturists for procedures such as post-implant radiographs and abutment fittings.

  For patients in remote or underserved areas, this change ensures faster assessment and treatment without requiring additional travel or expenses. In clinics where Denturists and Dentists work together, Denturists' ability to handle implant abutments frees up Dentists' capacity to treat other patients, optimizing human resource utilization within the oral health team.

  Analyses by the Organisation for Economic Co-operation and Development (OECD, 2021)

demonstrate that reducing redundancies in care pathways–such as consolidating diagnostic imaging and treatment planning–improves patient outcomes, shortens wait times, and enhances overall satisfaction.[17] By allowing Denturists to deliver these integrated services, the proposal significantly reduces wait times and enhances care accessibility for Ontarians.

- **Pillar Three: Hiring More Health Care Workers**

  Ontario's health care strategy prioritizes creating opportunities for new and internationally trained professionals to contribute to the province's health care system. The College of Denturists of Ontario (CDO) has already established pathways for internationally trained Dentists and other professionals to transition into Denturism practice without requiring additional formal education.

  Updating Denturists' scope of practice further maximizes the capabilities of these professionals, enabling them to work at their full potential. This not only increases the number of health care workers providing care to Ontarians but also supports the integration of internationally trained professionals into the province's oral health system. By leveraging the expertise of this workforce, the proposal ensures that Denturists can meet the growing demand for specialized oral health care services.

[17] **Organisation for Economic Co-operation and Development**. (2021). Health at a Glance 2021: OECD Indicators. Paris: OECD Publishing.

Appendix – Radiographic Curriculum Analysis

George Brown College

	Denturism	Dental Hygiene	Dental Assisting
Program Length	3 years (6 semesters)	3 years (6 semesters)	1 year (2 semesters)
Radiograph Course(s)	DENT 2013 Radiographic Interpretation Course Outline Course Section Information	DENT 1126 Dental Radiography I for the Dental Hygienist Course Outline Course Section Information DENT 1127 Dental Radiography II for the Dental Hygienist Course Outline Course Section Information	DENT 1047 Dental Radiography I Course Outline Course Section Information DENT 1051 Dental Radiography II Course Outline Course Section Information
Radiograph Curriculum Hours	14 hours	DENT 1126 – 56 hours DENT 1127 – 42 hours	DENT 1047 – 56 hours DENT 1051 – 42 hours
Course Description(s)	This third semester course is designed to introduce Denturism students with the information required in order to discuss, with dental personnel, dental radiographic imaging associated with treatment planning for full and removable partial dentures. The basic principles and application of dental radiography is reviewed. Emphasis is on developing the student's ability to recognize and identify normal anatomical landmarks that may be seen on intra- oral and extra-oral radiographs as well as abnormal or pathological conditions which may be	DENT 1126: This first semester course is designed to help the dental hygiene student to meet the requirements of Healing Arts Radiation Protection Act (H.A.R.P). The pre-clinical course introduces a study of the principles and applications of intra-oral radiographic techniques, quality assurance procedures, and processing and mounting of dental radiographs. Additional instruction is provided in recognizing and solving faulty radiographs, client management	DENT 1047: This course is designed to help the dental assisting student meet the requirements of the Healing Arts Radiation Protection (HARP) Act of Ontario. The theory component introduces the principles and applications of intra-oral radiographic techniques and provides students with knowledge of key components required by the regulations in the HARP Act. In the practical component, students will apply their theoretical knowledge and expose

	visible on dental radiographs and require referral. Practical experience is applied through interpretation of client radiographs in second and third year clinical courses.	and identification of normal radiographic landmarks. Through clinical practice and assignments in lab the students will be able to expose dental radiographs on manikins (DXTR). Various intra-oral radiographic techniques will be used while following radiation safety protocol and processing procedures in order to produce radiographs of diagnostic value. Successful completion of this course is a prerequisite to DENT 1127 (Dental Radiography Part 2). Please note: Students must successfully complete both DENT1126 and DENT1127 to have met the HARP approved program requirements. <u>DENT 1127:</u> Dental Radiography II consists of both a theory and practical component. Theory: The theory component consists of radiographic interpretation and is designed to provide dental hygiene students with the knowledge and information required to integrate dental radiographic imaging into the dental hygiene process of care. The knowledge gained in this course is required for and further developed in other oral health science courses. This knowledge is also integrated into the clinical client care aspect of the dental	radiographs on Dental X-Ray Training and Teaching Replica (DXTTR). Current infection prevention and control, quality control standards and HARP protocols, will be used to produce and process radiographs of diagnostic value. Successful completion of this course is a prerequisite to DENT1051. The George Brown College Dental Assisting Program is approved by the Director of X-Ray Safety at a College of Applied Arts and Technology and therefore, students who successfully complete DENT1047 and DENT1051 and who graduate from the Dental Assisting Program will be qualified to operate dental x-ray machines (non-CT/3D) as outlined in Regulation 543 under the HARP Act. <u>DENT 1051:</u> This second semester theory and practical DENT 1051 Radiography II course is designed to further develop the dental assisting students' knowledge and skills acquired in DENT 1047 Dental Radiography I in meeting the requirements of the Healing Arts Radiation Act (HARP). The theory component will advance the dental assisting students' comprehension of fundamental

		hygiene program to assist dental hygiene students in achieving competency in radiographic technique and interpretation during client care. The basic principles and application of dental radiography is reviewed while emphasis is on developing the dental hygiene student's ability to recognize and identify normal anatomical landmarks as well as recognition of abnormal radiographic signs, which may be visible on intraoral and extra-oral dental radiographs. Practical: This practical component of the course will further develop the dental hygiene student's practical radiography skills and radiographic competency as studied in DENT 1126. Intra-oral and extra-oral radiographic techniques will be practiced on manikins to produce radiographs of diagnostic value. Students will also practice digital imaging. Practice of sensor placement without actual exposure on student partners will further the dental hygiene student's knowledge of client management techniques, infection control in the radiography clinic and accessory radiographic techniques.	principles and application of dental radiography emphasizing radiation protection legislation and quality control. Students will develop the ability to identify and differentiate normal radiographic anatomy, dental restorations, various dental materials, and foreign objects present in both intra- and extra-oral radiographic images. Additionally, students will be introduced to extra-oral and accessory radiographic techniques, ensuring readiness for industry standards. The practical component aims to enhance students' proficiency, particularly emphasizing time management in acquiring diagnostically valuable images. Through practical exercises involving receptor placements on peers, students will further their understanding of HARP protocols, client management skills, infection control in the radiography clinic, as well as develop critical thinking abilities by learning to modify and adapt radiographic techniques to different clinical scenarios. Students who successfully complete both DENT 1047 and DENT 1051, and who graduate from the GBC HARP approved Dental Assisting Program, qualify to operate dental x-ray machines (non-CT/3D) in Ontario.

Georgian College

	Denturism	Dental Hygiene	Dental Assisting
Program Length	3 years (6 semesters)	3 years (6 semesters)	1 year (3 semesters)
Radiograph Course(s)	DENT 2022 Radiographic Interpretation	DENT 1057 Dental Radiography for the Dental Hygienist	DENT 1060 Dental Radiography
Radiograph Curriculum Hours	28 hours	70 hours	56 hours
Course Description(s)	**Course Description:** Students acquire skills to discuss, with dental personnel, radiographic imaging associated with treatment plans for full and removable partial dentures. The basic principles and application of dental radiography are examined. Students recognize and identify normal anatomical landmarks seen on intra-oral and extra-oral radiographs, as well as abnormal or pathological conditions that require referral. Practical experience is gained through the interpretation a client's radiographs. **Course Learning Outcomes:** Upon successful completion of this course, the student has reliably demonstrated the ability to: 1. recognize normal and abnormal radiographic signs on dental radiographs; 2. classify dental caries as viewed on dental radiographs; 3. classify periodontal conditions on dental radiographs;	Students learn basic principles of radiation physics, image production and safe operation of the dental x-ray unit. An emphasis is placed on the use of dental radiographs in comprehensive oral health care and relevant legislation in the practice of dental hygiene. Students practice radiography techniques in a pre-clinical lab setting on a manikin in preparation for client exposures while applying principles of client safety and quality assurance standards.	In this course, students prepare to take and process intraoral and extraoral dental images. The basic physics and principles of radiography, safety precautions, and the operation of the dental x-ray unit are examined. Students expose, process using environmental awareness and mount dental images using bisecting angle and paralleling techniques on manikins. Additional instruction is provided on recognizing and solving problem situations, and client education and management. NOTE: The ability to take dental radiographs is established by the Healing Arts Radiation Protection Act. Only Dental Assistants certified by the Ontario Dental Assistants Association and/or holding the NDAEB certificate may take dental radiographs prescribed by a dentist outside of an academic program.

	4. recognize pulpal, periapical lesions and dental injuries on radiographs; 5. formulate a patient treatment plan based on radiographic interpretation. **Course Content:** • radiographic anatomy on intra-oral and extra-oral radiographs • normal and abnormal radiographic signs and conditions • dental caries classification and periodontal conditions on radiographs • pulpal and periapical lesions and dental injuries • patient radiographs and treatment plans		

Oxford College of Arts, Business and Technology

	Denturism	Dental Hygiene	Dental Assisting
Program Length	2.5 years (132 weeks/3002 hours)	18 months (72 weeks/1878 hours)	11.5 months (50 weeks/1000 hours)
Radiograph Course(s)	RAD 008 Radiology	DH-230 - Dental Radiography Theory DH-231 - Dental Radiography Lab DH-236 - Dental Radiography Interpretation	DARD-106 Radiology I HSRD-200 Radiology II
Radiograph Curriculum Hours	76 hours 64 hours Theory 12 hours Practical (Radiograph Mounting Exercise and Interpretation Exercises for Denture Treatment)	DH-230- 45 hours DH-231- 37 hours DH-236- 20 hours	DARD-106 – 62 hours HSRD-200 – 40 hours
Course Description(s)	The purpose of this course is to introduce the denturist student to the basic radiological principles of intra-oral imaging for dento-alveolar structures. The radiographic examination plays an integral role in the diagnostic process in dentistry in conjunction with the clinical examination. The denturist must be proficient with intra-oral techniques and the ability to interpret radiographs to fulfill their roles as dental health care providers. Students are taught to	**DH-230-** This is the introductory course to dental radiography in which students will initially learn about the history, physics, equipment and image characteristics involved in dental radiography. This course will emphasize the need to understand and employ appropriate and protective radiation hygiene measures and standard radiographic techniques in relation to the dental hygiene standards of practice. Students	**DARD-106-**This course provides a foundation of general radiographic knowledge including a review of the physics, equipment, exposure techniques, processing, asepsis techniques, processing & exposure errors, criteria for the diagnostic quality x-ray imaging following ALARA principle. It outlines Occupational Health and Safety Act,Regulation 861, Safety Code 30. It will outline the specific legislation for Ontario dental facilities by reviewing

	always abide to their scope of practice within their jurisdiction.	will be able to combine the theoretical principles and apply the exposure, processing and mounting of dental radiographs in the lab component of this course **DH-231-** In this course students will apply the theoretical knowledge gained in dental radiography theory to expose, process and mount dental radiographs using various exposure techniques. Emphasis will be placed on the application of all principles of risk reduction. Student will have an opportunity to enhance their didactic skills in preparation for clinical practice. **DH-236-** This course will allow students to differentiate between the typical and atypical structures as seen on various types of dental radiographs. The dental image is a critical component of the diagnostic process. This valuable tool can be used for client education and collaboration with various health care professionals to provide comprehensive client care.	the HARP Act, Regulation 543 as it relates to health and safety for use of x-ray irradiation of human beings, prescribing standards for installation, registration, operator qualifications, machine standards, shielding, quality controls and assurance to protect operators and patients for best practice in the province. Patient relations, education, legal issues and an introduction to radiographic examination are included along with mounting of radiographs and the identification of normal anatomic features of the head and neck, teeth and surrounding structures. **HSRD-200 -**This course is a continuation of Radiography I. It covers the bisecting technique, occlusal & localization techniques and their purposes, and digital imaging. It describes different extraoral exposures and includes the identification of normal anatomy on a panoramic exposure. This course also provides a foundation for the interpretation of dental materials, foreign objects, caries, periodontal disease, pulpal, periapical lesions and trauma using the proper descriptive terminology. It reviews radiographic techniques for

			clients with special needs and provides an overview of three-dimensional digital imaging. As a continuation of Radiography I, the student will demonstrate principles of radiation protection from hazards or ionizing radiation, justification, optimization and low dose as well as infection control, radiation safety while in lab settings to include proper PPE, equipment testing, proper exposure and developing of film using various chemicals, proper exposure of digital x-rays, maintain and operate safety measures to include appropriate x-ray machine settings, correct alignment, good ergonomics, and exposure limits for radiation. Awareness when machine is active, warning lights, shielding, lead apron, proper distance behind protective wall during exposure, wear personal dosimeter making sure they are working within safe limits. Report any accidents or overexpose to proper personnel.

Northern Alberta Institute of Technology

	Denturism	Dental Hygiene	Dental Assisting
Program Length	3 years	N/A	N/A
Radiograph Course(s)	Anatomy and Radiology	N/A	Radiography 1 Radiography 2
Radiograph Curriculum Hours	The anatomy and radiology course is 75 hours. Approximately 30 hours of that time is for radiology.	N/A	Unknown.
Course Description(s)	Knowledge of orofacial anatomy and radiology are necessary to the practice of denturism. Students in Anatomy and Radiology will identify head and neck anatomy, hard and soft tissues of the oral cavity, tooth morphology and tooth notation systems. Radiology, as it relates to the denturist practice will be studied.	N/A	Radiography 1 - Applying principles of radiology, students will learn to produce radiographic images on a manikin. Emphasis will be placed on radiation protection, dental image characteristics, digital imaging equipment and techniques, quality assurance programs, and maintenance of radiography equipment. Students will also arrange dental images and identify anatomical landmarks on radiographs Radiography 2 - In the NAIT Dental Clinic, students will produce diagnostic dental images on a patient. Utilizing digital radiography , students will adapt techniques to patients requirements and gain experience to prepare for dental practice.

Acknowledgements

The following are thanked for their contributions to the development of this proposal:

- Adam Lima, DD
- Anas Al Halabi, DD, President, DAO
- Dr. Anthony Marini, Ph.D, Psychometrician
- Carlo DiNardo, DD, DGO
- Cliff Muzylowsky, DD, DAO
- Fernando Paiz, DD,1st Vice-President, DAO
- Gaganjot Singh, Council Member (Public Appointee), CDO
- Garnett Pryce, DD, Vice-President, Chair of Scope of Practice Working Group, CDO
- Harry Orfanidis, DD, Vice-President, DGO
- Jaro Wojcicki, DD, Past President, DAO
- John Kallitsis, DD, President, DGO
- Dr. John Maggirias, DDS, CEO, Dentacloud
- Lileath Claire, Past President (Public Appointee), CDO
- Meghan Hoult, Deputy Registrar, CDO
- Norbert Gieger, DD, Council Member, CDO
- Robert Velensky, DD, Chief Examiner, CDO
- Roderick Tom-Ying, Registrar and CEO, CDO
- Sean Akkawi, DD

And the following members of CDO Council: Alexia Baker-Lanoue, DD • Abdelatif (Latif) Azzouz, DD Aisha Hasan, Public Appointee • Avneet Bhatia, Public Appointee • Elizabeth Gorham-Matthews, DD Franklin Parada, DD • Kristine Bailey, President, Public Appointee • Majid Ahangaran, DD

Revision History

Date	Revision
Jan 2025	First publication date.
June 2025	Minor formatting updates
December 2025	Updated review of citations and sources, removed unavailable links or citations.