STANDARD OF PRACTICE

Provincial Dental Board of Nova Scotia

Use of Botulinum Toxin (Type A) and Esthetic Therapies in Dental Practice

November 2019

Preamble

The Standard of Practice for the *Use of Botulinum Toxin (Type A) and Esthetic Therapies* developed by the Alberta Dental Association and College (ADA+C) and approved in 2016 has been modified with permission for use by the Provincial Dental Board of Nova Scotia (PDBNS).

This document is the Standard of Practice in relation to the use of Botulinum Toxin (Type A) and esthetic therapies. Since contravention of the Standard may be considered professional misconduct, dentists employing Botulinum Toxin (Type A) and esthetic therapies must be familiar with its content, be appropriately trained, and regulate their practices accordingly.

This document indicates the minimum standards for the use of Botulinum Toxin (Type A) such as Botox®, Xeomin®, Dysport® and esthetic therapies in dentistry.

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INTRODUCTION

This document is the Standard for the use and administration of Schedule 1 drugs such as neuromodulators (e.g., Botulinum Toxin (Type A), dermal fillers, other agents (injected and/or topical) and for adjunctive non-surgical and/or surgical therapies used to provide comprehensive treatment for facial pain and cosmetic/esthetic therapy by dentists/dental specialists.

It is the dentist's/dental specialist's responsibility to ensure that appropriate educational training is undertaken in preparation for performing the treatments outlined in this standard. In addition, each dentist/dental specialist must apply to the PDBNS and be issued a certificate prior to providing the levels of care outlined in this Standard.

The PDBNS will review educational programs to determine if they satisfy the requirements of this Standard. Furthermore, any dentist or dental specialist who feels their training encompasses the procedures contained herein may apply to the PDBNS for a credentials review.

The PDBNS will develop a register and issue certifications based on the level of training achieved for all dentists and dental specialists. The PDBNS will also maintain a list of approved programs for each certification level.

Performing of any of the acts described in this standard without PDBNS certification and/or without adhering to the standard is considered professional misconduct and will result in disciplinary action against the licensee.

Dentists/dental specialists are advised that the core competencies and treatment modalities contained within the standard are not all encompassing. In particular, bruxism and myofascial pain and dysfunction are complex diagnoses that may require multiple treatment modalities that include but are not limited to neuromodulators. Therefore, it is the licensee's responsibility to ensure they have the appropriate training to establish a definitive diagnosis in order to provide appropriate treatment.

Dentists/dental specialists must also realize that the field of facial esthetic treatment and adjunctive therapies are constantly changing. Thus, new and emerging modalities may not be described or contained within this Standard. As a result, practitioners are required to consult with the PDBNS before administering any new or emerging modalities or adjunctive therapies for both esthetic and non-esthetic therapies not contained within the standard.

These esthetic and adjunctive procedures cannot be assigned to a support staff member or employee unless they are registered with a professional regulatory authority that allows for this restricted activity, and they meet the requirements of that regulatory authority to administer, formulate or dispense such agents, therapies or procedures.

Treatment must take place in an appropriate dental facility/clinical setting. This implies facility compliance with current PDBNS guidelines and standards for infection prevention and control.

PATIENT ASSESSMENT / MANAGEMENT

Dentists and dental specialists are only permitted to provide the treatment described in this Standard if the following criteria are met:

- The dentist/dental specialist has performed an appropriate and well-documented workup, including history, clinical examination, photographs and records.
- The esthetic or adjunctive treatment is part of a comprehensive dentofacial/ maxillofacial treatment plan.
- The patient has received appropriate treatment for any active disease identified at the time of the patient's comprehensive dental/head and neck examination.
- The patient's psychologic health has been assessed by the dentist/dental specialist and the patient's motivation, goals, concerns and expected outcomes have been discussed and documented.
- Informed consent has been obtained for all treatments, prescriptions and/or therapies including a discussion with the patient with respect to benefits, risks, post-operative care, sequelae, potential complications and alternative treatment option if applicable.
- The dentist/dental specialist is responsible to refer complex cases that exceed their level of training or ability to an appropriate healthcare professional.
- The dentist/dental specialist is responsible for continual reassessment and follow-up of the patient.

CERTIFICATION LEVELS AND EDUCATIONAL REQUIREMENTS

To obtain a certificate to provide the treatments outlined in this Standard, dentists/dental specialists must submit an application along with documentation of their training to the PDBNS. The application and supporting documents will be reviewed and a certificate will be issued if the applicant's training meets the Standard. It is considered professional misconduct to provide the care outlined in this Standard without a certificate.

In addition, the dentist/dental specialist must demonstrate evidence of continuing education in the field of facial esthetics and adjunctive procedures. Dentists/dental specialists with certificates to provide the care outlined in this Standard must include a minimum of 10 hours of continuing dental education in the field of facial esthetics and adjunctive procedures in their 3-year continuing education cycle to maintain certification.

For the purposes of this Standard, educational requirements and subsequent issuing of certificates has been divided into 6 structured and gated levels. A dentist/dental specialist cannot proceed to a subsequent level without completing the requirements of the preceding level.

Level 1: **Applied Anatomy Review and Introduction to Neuromodulators**

To obtain Level 1 certification, the applicant must complete a course designed to review head and neck anatomy, its relevancy to the administration and pharmacology of neuromodulators (e.g., Botulinum Toxin (Type A)) and to other esthetic and non-esthetic therapies and procedures. The applicant must provide the PDBNS with documentation of successful completion of such a course.

The education format must include a minimum of a 4-hour anatomical and functional cadaver laboratory and an 8-hour didactic educational program. There must be a formal evaluation at the completion of the course and documentation to attest to the competency of the individual.

The content of Level 1 educational programs must include the following:

- Head, neck, and temporomandibular joint applied anatomy, masticatory, neck and facial muscles, nerves, skin, etc., including the neurophysiology, musculature and circulatory systems
- Facial skeletal anatomical considerations and review of aging of the face
- Patient assessment, consultation, documentation, and continuing care for use of neuromodulators
- Patient evaluation for optimal esthetic and therapeutic outcomes
- Integrating neuromodulators into dental and maxillofacial treatment plans
- Indications and contraindications for extra-oral soft tissue esthetics
- Safety and risk issues for neuromodulator therapy
- Management and treatment of possible complications
- Assessing patient for signs of body dysmorphic disorder, recognizing when not to treat, and when to refer to an appropriate healthcare professional for counseling

Level 1 educational programs do not permit a dentist/dental specialist to provide patient treatment and are educational only. Successful completion of this course is a prerequisite to Level 2 training.

Upon successful completion of an approved Level 1 educational program, a dentist/dental specialist must submit a letter of confirmation and/or certificate of completion to the PDBNS. Upon receipt of this documentation, the PDBNS will issue a Level 1 certificate authorizing the dentist/dental specialist to progress to an approved Level 2 educational program. In the event that a member wishes to take a Level 2 program immediately following a Level 1 program, the member may submit Level 1 and Level 2 educational credentials **from the same approved educational provider** simultaneously.

Level 2: **Basic Neuromodulators: Upper Face and Bruxism Treatment**

This certification level will introduce the dentist/dental specialist to the use of neuromodulators for the superficial muscles of the upper face and for bruxism treatment.

Level 2 educational programs must include a minimum of at least 8 didactic hours and at least 8 hours involving direct participation in live treatment on a minimum of 6 patients. Clinical observation of treatment being rendered by others is insufficient for the requirements of this Standard.

In addition to all Level 1 core competencies, successful completion of a Level 2 educational program requires the understanding and application of the following enhanced core competencies:

- **Patient Assessment and Evaluation**
  - Diagnosis, documentation, treatment planning and proper dosing and delivery of neuromodulator treatment for both upper face and bruxism treatment
  - Indications for other treatment modalities
  - Indications and contraindications for these techniques and pharmaceuticals
  - Medical history taking as it relates to injected facial pharmaceuticals
  - Practical patient evaluation for maxillofacial esthetic and therapeutic outcomes
  - Pharmacology of injected oral and maxillofacial pharmaceutical treatment
  - Etiology and types of bruxism and anatomic considerations in bruxism
  - Accepted treatment techniques including mapping of anatomical muscle sites, muscle depths, proper preparation and dilution for oral and maxillofacial esthetic, and therapeutic outcomes

- **Safety and Risk Issues**
  - Proper sterile technique as it relates to the use of injected pharmacologic agents and patient treatment
  - Safety and risk issues for injected neuromodulator therapy
  - Knowledge of adverse reactions and how to avoid adverse reactions
  - Management and treatment of adverse reactions including ptosis, vascular occlusion, and injection-related complications

- **Treatment Planning and Delivery**
  - Integrating neuromodulators into dental therapeutic and esthetic treatment plans
  - Upper facial treatment procedures for therapeutic and esthetic maxillofacial outcomes
  - Continued assessment of treatment and therapeutic outcomes and standardized patient photography
  - Integrating neuromodulators with other treatments and therapies for the treatment of bruxism
  - Precise delivery of injected facial pharmaceuticals
  - Limitations of Level 2 treatments and recognizing need for higher-level treatments and referral to qualified healthcare professionals

- **Practice Management**
  - Provide customizable office forms and informed consent needed to begin treating patients

- Malpractice and jurisprudence issues
- Ethics in oral and maxillofacial esthetic procedures
- Understanding of team training in facial esthetics
- Patient education in facial esthetics in dentistry
- Recordkeeping and facial photographic documentation
- Informed consent procedures for facial esthetics treatment

The educational program must include a formal evaluation process and attest to the competency of the participant. Upon successful completion of a Level 2 educational program, a dentist/dental specialist must submit a letter of confirmation and/or certificate of completion to the PDBNS. Upon receipt and review of this documentation, the PDBNS will issue a Level 2 certificate authorizing the dentist/dental specialist to provide Level 2 treatment modalities to their patients. The member must maintain accurate treatment records and may be subject to random audits by the PDBNS.

Dentists/dental specialists must complete at least 20 Level 2 cases (which may include the 6 patients treated during the educational program) over a minimum 1-year period. The member may then complete an application for approval by the PDBNS before commencing Level 3 training.

Level 3: Advanced Neuromodulators: Mid-Face and Lower Face/Neck Regions and Myofascial Pain and Dysfunction Treatment

A dentist/dental specialist wishing to take an approved Level 3 educational program must be in possession of a Level 2 PDBNS certificate.

This certification level will introduce the dentist/dental specialist to advanced neuromodulator administration for mid-face, lower face and neck regions and for myofascial pain and dysfunction treatment.

Level 3 education must include a minimum of at least 8 didactic hours and at least 8 hours involving direct participation in live treatment on a minimum of 6 patients. Clinical observation of treatment being rendered by others is insufficient for the requirements of this Standard.

In addition to all Level 1 and 2 core competencies, successful completion of a Level 3 educational program requires the understanding and application of the following enhanced core competencies:

- **Patient Assessment and Evaluation**
  - Diagnosis, documentation, treatment planning and proper dosing and delivery of neuromodulator treatment for mid-face and lower face/neck regions and myofascial pain and dysfunction treatment
  - Indications for other treatment modalities
  - Advanced applied anatomy of the oral and maxillofacial, lower face and anterior and posterior neck, including cranial base, and related structures
  - Advanced education in injected facial pharmaceuticals

- Understanding of the latest neuromodulator pharmaceuticals and introduction to dermal fillers and how the 2 injected modalities work in tandem (Note: Level 4 is required to use dermal fillers.)
- Comprehensive and definitive diagnosis of myofascial pain and dysfunction
- Understanding of the precise skeletal and muscle anatomy involved in maxillary gingival excess
- Treating maxillary gingival excess (gummy smiles) with neuromodulators as an alternative treatment to surgical dental procedures
- Trigger point therapy for myofascial pain and dysfunction cases
- Advanced upper and mid-face procedures for esthetic and therapeutic maxillofacial and neck treatment
- Neuromodulator therapeutic treatments for chronic migraine and facial pain
- Ability to test and treat hyperactive lower face muscles for dental/facial esthetics, orthodontic retention and removable prosthodontics retention with neuromodulators
- Advanced indications and contraindications of facial esthetics and therapeutics use in dentistry
- Neuromodulator therapeutic treatments for chronic migraine and facial pain
- Alternative methods of treatment through differential diagnosis and offering patients all available options for oral and maxillofacial esthetics and therapeutics, including referrals to other qualified healthcare professionals

- **Treatment Planning and Delivery**
  - Avoidance and management of complications
  - Neuromodulator therapeutic treatment of myofascial pain and dysfunction, facial pain, bruxism cases, hypertrophic masticatory musculature, etc.
  - Integrating neuromodulators into a comprehensive treatment plan for treating definitively diagnosed myofascial pain
  - Continued assessment of treatment and therapeutic outcomes and standardized patient photography
  - Limitations of Level 3 treatments and recognizing need for higher-level treatments and referral to qualified healthcare professionals

- **Advanced Practice Management**
  - Understanding of advanced team training in facial esthetics
  - Enhanced informed consent procedures for facial esthetics treatment

The educational program must include a formal evaluation process and attest to the competency of the participant. Upon completion of a Level 3 educational program, a dentist/dental specialist must submit a letter of confirmation and/or certificate of completion to the PDBNS. The PDBNS will review the documentation and issue a Level 3 certificate authorizing the dentist/dental specialist to provide Level 3 treatment modalities if it is found to satisfy the Standard. The member must maintain accurate treatment records and may be subject to random audits by the PDBNS.

Dentists/dental specialists must complete at least 20 Level 3 cases over a minimum 1-year period. The member must then complete an application and have it approved by the PDBNS before commencing Level 4 training.

Level 4: Dermal Fillers: Facial Dermal Fillers, and Neuromodulators for Deep Muscles of Mastication

A dentist/dental specialist wishing to take an approved Level 4 educational program must be in possession of a Level 3 PDBNS certificate.

This certification level will introduce the dentist/dental specialist to dermal fillers and to neuromodulator treatment for deep muscles of mastication.

Level 4 education must include a minimum of at least 8 didactic hours and at least 8 hours involving direct participation in live treatment on a minimum of 6 patients. Clinical observation of treatment being rendered by others is insufficient for the requirements of this Standard.

In addition to all Level 1, 2 and 3 core competencies, successful completion of a Level 4 educational program requires the understanding and application of the following enhanced core competencies:

- **Patient Assessment and Evaluation**
  - Diagnosis, documentation, treatment planning and proper dosing and delivery of dermal fillers and advanced neuromodulator treatment
  - Indications for other treatment modalities
  - Advanced oral and maxillofacial anatomy and injected facial pharmaceuticals (A hands-on review of peri-oral facial anatomy and skin is recommended.)
  - Advanced facial skeletal anatomical considerations and review of aging of the face
  - Comprehensive patient assessment for more advanced combination treatment with neuromodulators and dermal filler pharmaceuticals for oral and maxillofacial esthetic and therapeutic cases

- **Advanced Facial Esthetics Treatment Planning and Delivery**
  - Facial esthetic procedures in the oral and maxillofacial areas with injected facial pharmaceuticals in association with dental, prosthodontic, orthodontic, periodontal and maxillofacial reconstructive treatment
  - Conservative lip enhancement procedures and avoidance of potential complications, enhancing the natural lip anatomy to create esthetic lip structures and proper smile lines
  - Smoothing lip lines and eliminating radial lip lines
  - Enhancing the upper, mid- and lower face using anatomical landmarks
  - Adding volume to the interdental papilla and residual dental ridges using dermal fillers
  - Limitations of Level 4 treatments and recognizing need for Level 5/6 treatments and referral to qualified healthcare professional

- Understanding facial functional anatomy, aging and skin care to enhance treatment procedures

- **Advanced Facial Esthetics Treatment Planning and Delivery**
  - Advanced dermal filler injection techniques including cross-hatching, scaffolding and bulk-filling
  - Comprehensively treating the upper, mid-, lower face, and related structures for dental and maxillofacial esthetics and therapeutics
  - Creating proper oral and maxillofacial contours with advanced lip sculpting, malar and sub-malar enhancements, and glabellar treatment
  - Continued assessment of treatment and therapeutic outcomes and standardized patient photography
  - Understanding advanced facial esthetic skin treatments

- **Comprehensive Treatment Objective and Non-Surgical Techniques**
  - Advanced indications and contraindications of facial esthetics and therapeutics use in oral and maxillofacial areas and their related structures
  - Alternative methods of treatment through differential diagnosis and offering patients all available options for oral and maxillofacial esthetics and therapeutics
  - Treatment sequence, patient management, post-operative instructions
  - Avoidance and management of complications

- **Advanced Practice Management**
  - Enhanced office forms and/or documentation with appropriate informed consent needed to begin treating patients
  - Understanding of advanced team training in facial esthetics
  - Enhanced patient education in facial esthetics in dentistry

The educational program must include review of head and neck anatomy (hands-on educational program) and review of mid-face and neck neuromodulator treatment to aid in determining the need for and use of dermal fillers for the mid-face and peri-oral region and review of deep muscle injections for temporomandibular joint dysfunction purposes (e.g., medial and lateral pterygoid muscles).

The educational program must include a formal evaluation process and attest to the competency of the participant. Upon completion of a Level 3 educational program, a dentist/dental specialist must submit a letter of confirmation and/or certificate of completion to the PDBNS. The PDBNS will review the documentation and issue a Level 3 certificate authorizing the dentist/dental specialist to provide Level 3 treatment modalities if it is found to satisfy the Standard. The member must maintain accurate treatment records and may be subject to random audits by the PDBNS.

If a dentist/dental specialist does not gain sufficient training and experience in deep muscle injections, they should restrict their Level 4 care to dermal fillers only.

Level 5: Advanced Non-Surgical Esthetic Procedures

Level 5 certification requires successful completion of the National Specialty Examination in Oral and Maxillofacial Surgery. Oral and Maxillofacial Surgeons currently performing these procedures must identify themselves as providers of these services on their practice permit renewal.

New oral and maxillofacial surgeons applying to the PDBNS must provide documentation of training to be certified to provide these services.

This level covers advanced non-surgical esthetic procedures for qualified oral and maxillofacial surgeons only. This level of certification will only be granted upon review of the applicants training and credentials. Level 5 procedures may include but are not limited to lasers, intense pulsed light (IPL) dermal therapies, dermabrasion, chemical peels, hair removal, and eyelash growth agents (e.g., Latisse®).

In addition to all Level 1, 2, 3 and 4 core competencies, successful completion of a Level 5 educational program requires the understanding and application of the following enhanced core competencies:

- **Patient Assessment and Evaluation**
  - Diagnosis, documentation, treatment planning, and proper dosing and delivery of advanced non-surgical esthetic procedures
  - Indications for other treatment modalities
  - Comprehensive patient assessment for advanced non-surgical esthetic procedures
  - Advanced head and neck applied anatomical considerations

- **Advanced Facial Esthetics Treatment Planning and Delivery**
  - Facial esthetic procedures in the oral and maxillofacial areas and related structures
  - Limitations of Level 5 treatments and recognizing need for Level 6 treatments and referral to qualified healthcare professionals
  - Understanding advanced facial functional anatomy, aging and skin care to enhance treatment procedures
  - Continued assessment of treatment and therapeutic outcomes and standardized patient photography

- **Comprehensive Treatment Objective and Non-Surgical Techniques**
  - Advanced indications and contraindications of facial esthetics and therapeutics use in oral and maxillofacial areas and their related structures
  - Alternate methods of treatment through differential diagnosis and offering patients all available options for oral and maxillofacial esthetics and therapeutics
  - Treatment sequence, patient management, postoperative instructions
  - Avoidance and management of complications
  - Continued assessment of treatment and therapeutic outcomes and standardized patient photography

- **Advanced Practice Management**
  - Enhanced office forms and/or documentation with appropriate informed consent needed to begin treating patients
  - Understanding of advanced team training in facial esthetics
  - Enhanced patient education in facial esthetics

Level 6: Advanced Surgical Esthetic Procedures

Level 6 certification requires successful completion of the National Dental Specialty Examination in Oral and Maxillofacial Surgery. Oral and maxillofacial surgeons currently performing these procedures must identify themselves as providers of these services on their practice permit renewal.

New oral and maxillofacial surgeons applying to the PDBNS must provide documentation of training to be certified to provide these services.

Level 6 certification includes but is not limited to: soft tissue/hard tissue esthetic procedures for the head and neck region, hair transplants, rhinoplasty, blepharoplasty, face lifts, liposuction, and fat and blood product transfers.

The Provincial Dental Board of Nova Scotia kindly acknowledges the Alberta Dental Association and College (ADA+C) for allowing the use of their resource material in the creation of this Standard. The Provincial Dental Board also acknowledges the contributions of the Review Committee.

APPENDIX I

Review Committee

Terms of Reference

Committee Composition

The Provincial Dental Board of Nova Scotia (PDBNS) shall strike an ad-hoc committee to review the credentials, educational programs and training materials submitted by any dentists wishing to provide the care described in the *Standard for the Use of Botulinum Toxin (Type A) and Esthetic Therapies*. The length of appointment will be three years, and members are eligible for reappointment by the PDBNS Board.

This committee shall consist of a minimum of three members, and the membership must have a certified oral and maxillofacial surgeon, a licensed dentist with experience in treatment modalities, and a licensed dental assistant.

Actions of the Committee

The Committee shall have two responsibilities:

1. The assessment of an individual PDBNS candidate's credentials under this Standard.
2. The assessment of an educational program under this Standard.

A candidate's appeal of a committee ruling shall be made to the Mandatory Continuing Education Committee.