This bill authorizes dental hygienists to administer nitrous oxide to a patient under the supervision of a dentist who is physically present on the premises and prescribes the administration of nitrous oxide by the dental hygienist. The bill also alters the definition of “practice dental hygiene” to include the administration of nitrous oxide. The State Board of Dental Examiners is required to adopt regulations regarding (1) the education, training, evaluation, and examination requirements for a dental hygienist to administer nitrous oxide and (2) the administration of nitrous oxide by a dental hygienist. Likewise, a dental hygienist must successfully complete any educational requirements and any written and clinical examination required by the board before administering nitrous oxide.

Fiscal Summary

State Effect: Special fund revenues increase minimally beginning in FY 2017, as more dental hygienists apply for a certificate to administer nitrous oxide under the bill. Expenditures are not materially affected.

Local Effect: None.

Small Business Effect: Minimal. Dental hygienists in dental practices are authorized to administer nitrous oxide with proper certification and under the supervision of a licensed dentist.

Analysis

Current Law: A dental hygienist may monitor a patient to whom nitrous oxide is being administered, if the monitoring occurs under the supervision of a dentist who is physically
A dental hygienist must complete several requirements as specified by regulations in the Code of Maryland Regulations (10.44.04): (1) hold an active license to practice dental hygiene in Maryland; (2) successfully complete a board-approved course of instruction that documents at least six hours of training that include four hours of didactic training and two hours of clinical training; (3) pass a written and clinical examination administered by the board-approved course with an overall passing grade of at least 75%; (4) submit an application; and (5) pay a $50 fee.

A dental hygienist may administer specified local anesthesia to facilitate the performance of dental hygiene procedures, but not as a medical specialty, if the administration is under the supervision of a dentist who is physically present on the premises and prescribes the administration of local anesthesia by the dental hygienist.

**Background:** A licensed dental hygienist has long been authorized to perform a preliminary dental exam; perform a complete prophylaxis, including the removal of any deposit, accretion, or stain from the tooth surface or restoration; polish a tooth or restoration; chart cavities, restorations, missing teeth, periodontal conditions, and other features observed; apply a medicinal agent to a tooth for a prophylactic purpose; take a dental X-ray; or perform any other intraoral function authorized by the State Board of Dental Examiners.

Historically, a dental hygienist in Maryland has practiced under the indirect supervision of a dentist, which means the dentist authorizes the procedure and remains in the office while it is being performed. To more efficiently serve patients and promote proper preventive oral health care, dentistry practices in Maryland have trended toward permitting hygienists to work under less restrictive supervisory requirements. For example:

- Chapters 164 and 165 of 2007 allowed a dental hygienist who is authorized to practice under a licensed dentist’s general supervision in a government-owned and -operated facility or public health department to apply fluoride, mouth rinse, or varnish.
- Chapter 316 of 2008 authorized a dental hygienist who is a permanent or contractual employee of the federal government, a State or local government, or a federally qualified health center and working in specified facilities to apply fluoride and sealants under the general supervision of a licensed dentist. Chapter 316 also expanded the types of facilities in which a dental hygienist may practice under general supervision, specified that these facilities are not required to obtain a general supervision waiver, and repealed the requirement that a dentist or physician evaluate or diagnose a patient before a dental hygienist can treat the patient in these facilities.
- Chapters 565 and 566 of 2009 expanded the scope of practice for a dental hygienist by allowing a dental hygienist to perform manual curettage in conjunction with scaling and root planing and to administer local anesthesia.
Chapter 733 of 2010 authorized a dental hygienist to practice in a long-term care facility under the general supervision of a dentist. Chapter 381 of 2014 made these provisions permanent.

 Chapters 271 and 272 of 2011 allowed a dental hygienist to monitor a patient to whom nitrous oxide is being administered. Chapter 382 of 2014 made these provisions permanent.

 Chapter 220 of 2012 allowed dental hygienists to administer local anesthesia by inferior alveolar nerve block.

Nitrous oxide sedation is the calming of a nervous or apprehensive individual without loss of consciousness through the use of systemic inhalation of nitrous oxide gas. According to the American Dental Hygienists’ Association, 31 states and the District of Columbia authorize dental hygienists to administer nitrous oxide; of these jurisdictions, 20 require a specialized permit or certificate.

**State Revenues:** The State Board of Dental Examiners advises that 227 dental hygienists currently hold a certificate to monitor the administration of nitrous oxide and that these certificate holders will likely apply for a certificate to administer nitrous oxide under the bill. The board also anticipates that more dental hygienists will seek certificates under the bill compared to the current number of certificate holders; however, the board does not anticipate numbers that would have a significant fiscal or operational impact. The cost to obtain a certificate to administer nitrous oxide will likely be the same as the current cost to obtain a certificate to monitor the administration of nitrous oxide ($50).

This analysis assumes that the board develops and implements regulations and begins issuing certificates in fiscal 2017. Furthermore, this analysis assumes that individuals who currently hold a certificate to monitor the administration of nitrous oxide will obtain a new certificate to administer nitrous oxide in fiscal 2017, and that a smaller number of certificates will be issued annually in subsequent years. Certificates are issued on a one-time basis and do not need to be renewed. Therefore, special fund revenues increase minimally beginning in fiscal 2017.

*For illustrative purposes only,* if all 227 individuals who hold certificates to monitor nitrous oxide obtain a certificate to administer nitrous oxide in fiscal 2017 and approximately 57 new certificates are issued annually thereafter (25% of current certificate holders), special fund revenues increase by approximately $11,350 in fiscal 2017 and by $2,850 annually beginning in fiscal 2018.
Additional Information

Prior Introductions: None.


Information Source(s): Department of Health and Mental Hygiene, American Dental Hygienists’ Association, Department of Legislative Services

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