



Dental Public Health Activity Descriptive Summary

Practice Number: 18002
Submitted By: Iowa Department of Public Health
Submission Date: October 2001
Last Reviewed: July 2018
Last Updated: July 2018

Fluoride Varnish Application Program

The Iowa Department of Public Health (IDPH) contracts with regional public and private non-profit organizations to provide Title V Maternal and Child Health (MCH) services in all 99 Iowa counties. These agencies are responsible for assuring access to preventive and restorative dental services for their clients, now a component of the I-Smile™ initiative. Since 1999, application of preventive fluoride varnish has been provided through these Title V contractors. Dental hygienists and nurses employed by the contract organizations provide screenings and fluoride varnish applications to low-income children and pregnant women.

IDPH worked with The University of Iowa College of Dentistry to develop a fluoride varnish protocol in 1999 and sponsored training for dental hygienists to perform early childhood dental screenings and fluoride varnish applications. In addition, in the late 1990's the Iowa Department of Human Services (DHS) collaborated with IDPH to allow EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Exception to Policy for Title V agencies, enabling them to be reimbursed for oral screenings and fluoride varnish applications provided by dental hygienists when an exception was requested of DHS. This exception is no longer required; reimbursement has become a standard of care as part of the EPSDT program. Medicaid reimburses Title V contractors for up to four fluoride varnish applications a year per client, when provided by a dental hygienist or by a trained nurse or physician assistant. (All non-dental personnel must be trained using an IDPH-approved training.)

In 2017, there are 25 Maternal and Child Health contract organizations that employ dental hygienists and nurses to provide fluoride varnish to at risk children and pregnant women. Fluoride varnish is provided to children who have one or more of the following risk factors: visible plaque on primary incisors, carious lesions, white spot lesions, history of decay, and/or low socioeconomic status. Screenings and fluoride varnish applications are provided at WIC clinics, preschools, schools, day care facilities, and Head Start centers. Fluoride varnish is provided to pregnant women who have one or more of the following risk factors: carious lesions, white-spot lesions, a history of decay and/or low socioeconomic status. Screenings and fluoride varnish applications are provided at WIC clinics. Women and children are referred to dentists for regular and restorative dental care.

In 2017, costs for the Title V contractors to employ or contract a dental hygienist ranged from \$35 to \$60 per hour. Agency costs to apply fluoride varnish to a child range from \$18- \$33 and from \$22 - \$145 for an adult. Maximum Medicaid reimbursement is \$13.95.

With the I-Smile™ dental home initiative now in place, Title V contractors are able to reach many more at-risk clients. In the first year of fluoride varnish application through Title V, Medicaid-enrolled children received 348 fluoride varnish applications, increasing to more than 860 the second year. By the end of 2016, over 60,400 fluoride varnish applications had been provided to uninsured and Medicaid-enrolled children through Title V child health contractors.

Several oral health objectives in Healthy People 2020 are being met through this program. Awareness about the importance of oral health is communicated to families and pregnant women, fluoride varnish is a proven effective preventive intervention and going to the children in WIC clinics, preschools, schools, day care facilities, and Head Start centers reduces disparities in access. Pregnant women receive fluoride varnish applications in WIC clinics. All clients receive referrals to dental care. Assistance in making appointments, appointment reminders, and help with transportation is also

available through the I-Smile™ /Title V Programs. Using fluoride varnish within the I-Smile™ Program is improving the oral health of children and pregnant women.

Lessons Learned:

Having a fluoride varnish protocol reinforces the safety and effectiveness of fluoride to reduce the risk of dental caries and encourages public health and other health professionals to incorporate its use within practice. This has resulted in not only increased use within the Title V child health and maternal health programs, but some medical practices in Iowa include it within well-child examinations for Medicaid-enrolled children. This expansion of dental prevention within public and private settings has also increased the ability for at-risk children to receive screenings, risk assessments, anticipatory guidance for parents, and referrals for early and regular dental care. The interest by medical providers has been woven within the I-Smile™ Dental Home Initiative – trainings and tools have been created to assist medical providers in becoming part of a child’s dental home through screenings, fluoride applications, and oral health education.

A close working relationship with the Medicaid program/Department of Human Services has also been crucial to the success and sustainability of this program. When evidence showed that four fluoride varnish applications a year would benefit at-risk children, Iowa’s Medicaid program agreed to reimburse Title V contractors for application every 90 days. Unfortunately, the reimbursement rate has remained quite low for this service.

Anecdotally, hygienists working in Iowa’s school-based sealant programs report seeing less decay than in the past, likely related to the large increases in the number of at-risk children receiving fluoride varnish applications and referrals to dentists at early ages. Iowa’s surveillance system, however, did not include a way to measure the number of teeth or sites with decay. As a result, there has not been a way to compare past decay experience with present experience for Iowa children. In response, IDPH has incorporated the addition of the indicator “number of teeth with decay” to its surveillance system. This data will allow IDPH to further consider the impact of the provision of fluoride varnish within I-Smile/Title V.

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