Next Steps in Oral Health:

Case for Fluoride Varnish Reimbursement for Children and Pregnant Women

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Oral health is a key component of overall health and optimal health can be maintained or improved during the prenatal period. Pregnancy is an opportune time for health interventions and serves as a "teachable" moment when women may be motivated to adopt more healthy behaviors. Studies show that oral health services are extremely important and can be provided safely during pregnancy. However, the use of dental services is far below that of the rest of the population. Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) indicate that in 2018, 84 percent of women had dental insurance during pregnancy, but only 43 percent had their mouth examined and teeth cleaned. The 2018 PRAMS data also show that women enrolled in Medicaid, or who belong to a racial or ethnic minority, are much less likely to obtain oral health care when pregnant compared to women from families with higher incomes, those who are privately insured, or who are non-Hispanic white.

The perinatal period begins at conception and ends two months after delivery. It is a unique time during a woman's life and is characterized by complex physiological changes that may adversely affect oral health. Several factors play a part in the oral health of women during this period, including an ability to access and utilize care; financing; knowledge, attitudes, and behaviors; and workforce preparedness and willingness to serve this population.

According to the American Dental Association, providing preventive services and education to expecting mothers can lead to improved oral health in women, their young children, and the family unit. Hormonal and immunologic changes during the prenatal period make pregnant women susceptible to oral health problems and maternal periodontal disease is associated with preterm or low birthweight.

Physiological and behavioral changes during pregnancy adversely affect oral health. In addition, studies report that salivary quality, amount, and increases in cariogenic oral bacteria occur during pregnancy, which elevates the risk for development and progression of tooth decay. Tooth decay during pregnancy can cause pain, nutritional deficiencies, lost workdays, and reduced employability, all of which adversely affect a woman's quality of life. Additionally, children born to mothers with poor oral health and high levels of cavity-causing bacteria are at higher risk for developing tooth decay, the most prevalent preventable chronic disease of children in the United States. In one study, fluoride varnish application among women was shown to contribute to a reduction in the transfer of cariogenic (caries-causing) bacteria to their children. These bacteria primarily pass from mother to child soon after birth, so it makes sense that reducing the concentration of these bacteria in the mother's mouth before birth leads to less being transferred and a reduced or delayed potential for the development of cavities in children.

Pregnancy and motherhood are promising times for oral health promotion, better home care practices, and professional interventions by all health care providers. These activities include education on dental disease processes (primarily dental caries and periodontal); self-care for prevention; professional services, such as fluoride varnish application (dental caries prevention); and teeth cleaning (promote health and treat inflammation of gingiva/periodontium). The table below describes how the Illinois Medicaid program

does and can intervene in ways that support the health of the mother and young child members.

	Current Illinois Medicaid Reimbursable Service by Medical Provider	**Current Illinois Medicaid Reimbursable Service by Oral Health Provider**
Child age 3 years or younger	Yes, education and risk-based fluoride varnish application.	Yes, education and risk-based fluoride varnish.
Child 3-6 years	No, education and risk-based fluoride varnish application. – **ADD SERVICE**	Yes, education and risk-based fluoride varnish application.
Pregnant or new mom	No, education and risk-based fluoride varnish application. – **ADD SERVICE**	No, education and risk-based fluoride varnish application. – **ADD SERVICE**

Improving access to dental care for the maternal and preschool child populations is a considerable task, one that requires an interdisciplinary approach. Medical providers see both populations frequently, so they are in a unique position to support the dentist's efforts to educate and intervene when poor oral health is diagnosed. As stated earlier, dental visits occur in fewer than 50% of pregnant women. The 2017 Illinois CMS 416 reports that about 32% of children under the age of 6 received a preventive service. A strong case can be made for planning and executing an effective prevention outreach program targeting to providers of all types to increase the use of prevention services.

Medical providers see pregnant women and preschool-aged children far more frequently and are in a special position to assess, triage, and refer to an oral health provider who will complete an oral health assessment and, if necessary, provide treatment for urgent issues and disease. Two major ways in which trained medical providers can assist with this effort are through 1) expanding the education and risk-based fluoride application to children up to age 6 and pregnant women; and 2) providing anticipatory guidance, risk-based application of fluoride varnish, referral to dental care, and following up during future prenatal care and well-child visits.

Many state Medicaid programs include fluoride varnish as a covered service for children up to age 6. Medicaid programs in Georgia, Iowa, Missouri, Nebraska, Nevada, Oregon, Vermont, and Wisconsin currently offer and reimburse for fluoride varnish services during pregnancy. Other states have initiated programs that provide preventive oral health care through the Special Supplemental Nutrition Program for Women, Infant, and Children (WIC) program by co-locating these services at the same clinics. Reimbursing medical and dental providers for this service would help to improve access to fluoride treatments and decrease dental decay rates among pregnant women and young children.

In much the same way that the Illinois Bright Smiles from Birth fluoride varnish program works for children age 3 and younger, medical providers who have completed the relevant modules of the Smiles for Life, an Oral Health Curriculum, will be able to bill for fluoride varnish services. This activity will offer medical providers a "whole health" strategy emphasizing the importance of oral health care, help to improve self-care practices, and connect to follow up dental care, including periodontal treatment if needed.

Illinois' provision of education and risk-based fluoride varnish application to children up to age 6 years and women during pregnancy can positively impact health status by helping to reduce or delay the incidence of dental caries in early childhood and improved dental caries and periodontal health status during and after pregnancy. Studies have shown that improving the oral health of pregnant women is directly correlated with fewer negative birth outcomes, including preterm and low birthweight babies.

Overall, these health promotion and prevention efforts will help lead to a reduction in total costs to Medicaid by improving the oral health of pregnant women and children up to age 6 and minimizing the risks of adverse birth and childhood outcomes.

SOURCES

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APPENDIX A

Current protocol for reimbursement for fluoride varnish application by non-oral health medical staff (https://www.illinois.gov/hfs/SiteCollectionDocuments/hk200.pdf)

HK-203.8 Oral Health Screening/Fluoride Varnish

Beginning at the 6-month visit, physicians should counsel caregivers on oral health, perform a dental screening for visual signs of decay and assess the child's oral health, and provide anticipatory guidance. Physicians should refer children to a dental home for routine and periodic preventive dental care within six months of the eruption of the first tooth or by age 1, as per recommendations by the American Academy of Pediatrics (AAP), the American Dental Association (ADA), and the American Academy of Pediatric Dentists (AAPD).

The AAP's *Bright Futures, 4th Ed.* recommends oral health assessments begin at 6 months and continue at well child visits at 9-, 12-, 18-, 24-, 30-, and 36-months and 6 years.

Physicians must be trained in an Illinois Department of Healthcare and Family Services (HFS)-approved training program to be eligible for reimbursement for applying fluoride varnish. Providers complete training in the HFS-approved Bright Smiles from Birth program and provide their Medicaid license number for enrollment in the program. Reimbursement is $26 per application up to three times a year on children under 36 months. The procedure code for application of varnish is D1206. Information about HFS' reimbursement rates is available on the HFS Fee Schedule website. The Bright Smiles from Birth training program can be found on the American Academy of Pediatrics Illinois Chapter website. Physicians trained in the program must perform the oral health assessment themselves. The fluoride varnish application may be delegated to ancillary medical staff that have been either trained in an HFS-approved training program themselves or trained by another provider who has been trained through the program.

An oral health screening is part of the physical examination but does not replace referral to a dentist. Dental benefits for children include services for treatment of early childhood caries, relief of pain and infections, restoration of teeth, dental sealants, prophylaxis, and maintenance of dental health, including instruction in self-care oral hygiene procedures. Dental care for children is **not** limited to emergency services. For assistance in finding a dentist for referral, contact DentaQuest of Illinois.