

# Expanding Sealant Coverage

With the right tools, cavities (caries) are almost entirely preventable. Yet, caries remain the single most common chronic childhood disease – five times more common than asthma.<sup>1</sup> As one tool in the fight against caries, dental sealants are very cost-effective.

Dental sealants protect teeth by forming a mechanical barrier against the harmful bacteria that can cause tooth decay. Applied by a dentist or dental staff, sealants fill the grooves and pits of teeth, usually without drilling. With this barrier in place, the acids that are produced as a by-product of specific kinds of bacteria in the mouth have a hard time getting to the teeth. Without such a barrier in place, these acids can dissolve minerals in teeth, a process called demineralization, which can ultimately lead to cavities. Sealants have been shown to reduce the need for fillings by about 72 percent.<sup>2</sup>

Biting surfaces of molar teeth are the most likely location for cavities to occur (88.8 percent of children’s cavities occur here) because harmful bacteria that produce acid can hide in the grooves and pits on molar surfaces.

Using reviewed literature, we know that children who have received a single molar filling have greater than a 90 percent probability of receiving fillings on all their other molars within the next five years.<sup>3,4</sup>

#### **Delta Dental of Wisconsin Recommends:**

Sealant coverage for primary molars and other permanent molars for patients 6-19 years of age, covered under the diagnostic and preventive services category of the group’s dental plan.

## **Significant long-term savings**

Applying sealants to children and young adults from 6-19 years of age significantly reduces the risk of cavities and is one of the ways Delta Dental helps employers manage the health of their employees and the employees’ families. To further encourage the use of sealants, Delta Dental recommends that they be included in the diagnostic and preventive services category of benefits, which are generally covered at the highest level. Sealants are especially encouraged for children who have had cavities in either their primary molars or other permanent molars.

Sealants generally stop the need for the first filling, which is important because science has not yet developed permanent tooth filling materials. Avoiding the first filling stops the need for subsequent filling replacements, thus lowering the lifetime cost of dental care and improving the patient’s quality of life. Considering the lifetime cost of a single cavity is more than \$2,000 (fillings need to be replaced on a regular basis, and often ultimately result in the placement of a crown),<sup>5</sup> protecting teeth with sealants is a good investment.

Delta Dental of Wisconsin has introduced a plan design change option for groups that takes into consideration the scientific evidence that supports the expanded coverage for sealants (see shaded box). The cost impact is a 0.5% increase vs. current standard coverage; the cost impact for groups not offering standard sealant coverage may vary.

<sup>1</sup> Department of Health and Human Services, Oral Health in America: A Report of the Surgeon General, May 2002; 2.

<sup>2</sup> Lodal C et al. Factors influencing the effectiveness of sealants – a meta-analysis. Community Dent Oral Epidemiol 1993; 21:261-268.

<sup>3</sup> NIH consensus Development Conference on Diagnosis and Management of Dental Caries Throughout Life, Bethesda, MD. March 26-28, 2001. Conference Papers. J Dent Educ 2001; 65:935-1179.

<sup>4</sup> Badovinac RL, Morgan KE, Lefevre J, Wadhawan S, Mucci L, Douglass CW. Risk assessment criteria applied to a screening exam; implications for improving the efficiency of a sealant program. J Public Health Dent. 2005 Fall;65(4):203-8.

<sup>5</sup> Delta Dental Data Analysis Center.