# Policy on Third-Party Reimbursement of Fees Related to Dental Sealants

### **Latest Revision**

2021

### Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that the placement of sealants and their continued maintenance are scientifically-sound and cost-effective techniques for prevention of pit-and-fissure caries and to prevent the progression of early noncavitated carious lesions.

#### Methods

This policy was developed by the Clinical Affairs Committee, adopted in 1999<sup>1</sup>, and last revised by the Council on Clinical of Affairs in 2016<sup>2</sup>. This update is based upon a review of current dental and medical literature related to dental sealants. The update used electronic database and hand searches of articles using the terms: dental sealants AND insurance; fields: all; limits: within the last 10 years, humans, English. Sixty-one articles matched these criteria. Papers for review were chosen from this list and from the references within selected articles.

## Background

According to national estimates, the prevalence of dental caries (untreated and treated) in primary or permanent teeth among children ages two through 19 years was 45.8 percent for 2015-2016.3 Data indicate that around 40 percent of children ages two through eight years have experienced dental caries in their primary teeth, with 44 percent of caries lesions in the pits and fissures.<sup>4,5</sup> Pit and fissure occlusal caries occurs disproportionately higher compared to smooth surface caries in the school-aged population.<sup>6,7</sup> Permanent first and second molars are especially at increased risk as fluoride has less preventive effect on pits and fissures than on smooth surfaces.<sup>6,7</sup> Yet, any tooth, including primary teeth and permanent teeth other than molars, may benefit from sealant application due to fissure anatomy and caries risk factors.<sup>6</sup> Caries risk may increase due to changes in patient habits, oral microflora, or physical condition, and unsealed teeth subsequently might benefit from sealant application.<sup>6</sup> Placement of pit-and-fissure sealants significantly reduces the percentage of incipient noncavitated caries lesions that progress in children, adolescents, and young adults, compared to unsealed teeth, for as long as five years after sealant placement.8 When placed over existing caries, sealants lower the number of viable bacteria by at least 100-fold and reduce the number of lesions with any viable bacteria by 50 percent.<sup>9</sup> Sealants provide secondary prevention by inhibiting or arresting the progression of pit-and-fissure caries.7

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Current data show that, although initial sealant retention rates are high, sealant loss does occur.<sup>7</sup> Receiving periodic evaluation of sealants for maintenance or replacement is in the patient's interest.<sup>10,11</sup> Without recall and maintenance, sealant failure will compound over time, leaving previously sealed surfaces with a caries susceptibility equal to that of surfaces that never were sealed.<sup>12</sup> With appropriate follow-up care, the success rate of sealants may be 80 to 90 percent, even after a decade.<sup>5,11,13</sup>

Although sealants are safe and effective, they continue to be underutilized.<sup>6,7,14</sup> Sealants are particularly effective in preventing pit-and-fissure caries. They provide cost savings if placed on patients during periods of greatest risk by delaying or avoiding invasive treatment and the destructive cycle of dental caries.<sup>6,15-17</sup> However, initial insurance coverage for sealants often is denied based on the age of the patient, and insurance coverage for repair or replacement may be limited.<sup>18-20</sup>

#### **Policy statement**

The AAPD encourages all policy makers and third-party payors to consult the AAPD in the development of benefit plans that best serve the oral health interests of infants, children, adolescents, and individuals with special health care needs.

The AAPD advocates that the dentition periodically be evaluated for developmental defects and deep pits and fissures that may contribute to caries risk and that sealants be placed on primary and permanent teeth judged to be at risk for dental caries. AAPD encourages placement of dental sealants on early (noncavitated/incipient) caries lesions to inhibit lesion progression. Once sealants have been placed, they should be evaluated for repair or replacement as part of a periodic dental examination.

The AAPD encourages third-party payors to:

 recognize that dental sealants are scientifically-sound and cost-effective techniques for primary or permanent teeth at increased risk for caries and for early (noncavitated/ incipient) caries lesions.

ABBREVIATION AAPD: American Academy of Pediatric Dentistry. • base third-party coverage for sealants on a patient's caries risk rather than age. Timing of the eruption of teeth can vary widely. Furthermore, caries risk may increase at any time during a patient's life.

The AAPD shall continue to work with other dental organizations, the insurance industry, and consumer groups to make the advantages of dental sealants understood and to seek reimbursement for fees associated with their placement, maintenance, and repair.

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