

# Targeting school-based dental sealant programs: who is at "higher risk?"

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## Keywords

pit and fissure sealants; dental sealants; schools; dental caries.

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## Abstract

**Objectives:** To assess the effect of various school-level Free and Reduced Price Meal Program (FRPMP) enrollment-based risk thresholds on the ability of school-based sealant programs (S-BSPs) to reach higher risk children.

**Methods:** We used data from a statewide third grade oral health survey to compare: a) prevalence of dental caries for higher-risk children, using three different sets of child risk criteria based on social determinants; and b) dental caries and other access-related indicators for children at higher-risk schools based on four FRPMP-based thresholds ( $\geq 60$  percent of children FRPMP-enrolled,  $\geq 50$  percent,  $\geq 40$  percent,  $\geq 30$  percent). In addition, we used school enrollment and FRPMP enrollment data to compare the percentages of eligible schools and of higher-risk children resulting from the various thresholds.

**Results:** The prevalence of caries experiences and untreated caries were not significantly different for higher risk children categorized by the respective child caries risk criteria. Regardless of school-level risk threshold, children at higher risk schools were more likely to have caries experience, untreated caries, and no recent dental visit and less likely to have private dental insurance than children at lower risk schools. For these measures, children at higher risk schools were similar to each other regardless of risk threshold and were similar to higher risk children at all schools. The number of additional higher risk children per additional higher risk school showed a large decline between the 40-49 percent and 30-39 percent FRPMP enrollment tiers.

**Conclusions:** Targeting higher risk schools to reach higher risk children is a practical and effective approach for increasing sealant prevalence through S-BSPs.

## Introduction

School-based dental sealant programs (S-BSPs) are an effective community-based approach to preventing dental caries (1). The percentage of third grade students with at least one sealant on a permanent molar tooth is the only National Maternal and Child Health Performance Measure directly related to oral health (2). S-BSPs, which have limited resources, should be targeted to reach the greatest number of children who are at higher risk for dental caries (3-8).

Contrary to the targeting of sealants in dental care settings such as private offices and safety net dental clinics – which

generally occurs at the level of the individual, the tooth, and even the tooth surface – the most significant part of sealant targeting through S-BSPs occurs at the population level through school- and grade-level selection (5,9). This approach is consistent with the need for dental public health programs to include social determinants of health and population health in their assessment of risk (10). Some targeting measures, however, are impractical or unacceptable for many schools. For example, targeting on race or income for individual children is often viewed as stigmatizing (3) and targeting based on the absence of a dental home is complex and difficult to assess. Targeting S-BSPs to populations rather than individuals is more cost-effective (11) and can be more

effectively implemented (12). Therefore, many S-BSPs target higher risk schools to reach higher risk children (9).

Current information about how S-BSPs target their efforts suffers from a number of limitations, including a lack of distinction between S-BSPs and other types of sealant programs (e.g., community programs with no school involvement, school-linked programs). Available information indicates that the most common targeted S-BSP criterion reported by state dental program directors is the percent of children at a school who are enrolled in the Free and Reduced Price Meal Program (FRPMP). While the most common target threshold level reported by states is  $\geq 50$  percent enrollment, thresholds of 65 percent, 60 percent, and 30 percent also were reported in 2004-2005 (13). The eligibility ceiling for the FRPMP is 185 percent of the federal poverty level (FPL) (14), and the program has been shown to be an available and effective proxy indicator for family income (15,16). The practice of targeting S-BSPs to groups of children believed to have greater caries risk is supported by national data demonstrating that children from low-income families are at greater risk for dental caries experience and for untreated caries (17,18), are less likely to have dental sealants (18) and are less likely to have a dental visit in a year (19) than their higher income counterparts.

Although S-BSPs may use FRPMP enrollment as a proxy for low family income and as an indicator group for its target population, the Surgeon General's Report on Oral Health (7) described higher risk children more broadly as "vulnerable populations less likely to receive private dental care, such as children enrolled in free or reduced-cost lunch programs," implying that other children could be included in the definition as well. An expanded definition of higher risk children – including access-related indicators (ARIs) – composed of any child enrolled in either the FRPMP or Medicaid, or who have no dental insurance and no dental visit within the past year was used in an analysis of sealant prevalence among Ohio third grade children (20). In Ohio, during the time of this study, children could be eligible for Medicaid [200 percent of FPL (21)] but not for the FRPMP.

In order to design a community-based prevention program – whether the community is a state, county, city or catchment area – planners must consider the population needs, effective population-based approaches, and available resources (5). While there is agreement that S-BSPs are an effective community-based caries prevention approach, that S-BSPs should be targeted to higher risk children and that school lunch program eligibility is a useful tool for targeting, there has been no published population-based model for S-BSP planners to use when designing programs around those principles.

The purpose of this report is to provide estimates of the impact of various school FRPMP-enrollment thresholds on oral health status (i.e., higher risk versus lower risk children)

and on the potential proportion of public school students eligible for an S-BSP. In order to be of use to state and local planners, we will address three questions from the perspective of S-BSPs: a) who is a higher risk child?; b) which are higher risk schools?; and c) what is the impact of various FRPMP enrollment thresholds on the overall proportion of schools and higher risk children eligible for S-BSPs and the number of higher risk children per eligible school? The perspective of S-BSPs assumes that higher risk children are targeted by establishing school eligibility criteria for participation in an S-BSP. Furthermore, it assumes that eligibility criteria are based on a school FRPMP enrollment threshold.

In 2004-2005, the Ohio Department of Health completed a statewide survey of third grade students that included clinical assessment and a questionnaire completed by the child's parent or guardian (22). Data from this survey were used to generate estimates for Ohio. This model should be helpful to other S-BSP planners for other states as well.

## Methods

### Data collection

Ohio's "Make Your Smile Count" (22) open mouth oral health survey of third grade students was conducted according to the Basic Screening Surveys (BSS) methodology (23), which is widely used by state dental programs and others. The BSS methodology collects prevalence data through a combination of direct observation by a screener and a questionnaire completed by the child's parent or guardian. The Ohio Department of Health's institutional review board approved the survey.

Consent forms with attached questionnaires were sent home with the students to be completed and returned by a parent or guardian. In addition to questions about the child's FRPMP enrollment and whether or not they received dental sealants at school, the questionnaires included five multiple-choice questions related to access to dental care, including how recently the child visited a dental office and the method of payment for dental care. With a light source and disposable dental mirror, trained dentist and dental hygienist screeners directly observed whether the children had one or more decayed, missing or filled teeth (caries experience), decayed teeth (untreated caries), and dental sealants. Explorers were available but not routinely used by screeners (dentists and dental hygienists), who had been trained to never use an explorer with force.

### Sampling

A stratified, clustered random sample was drawn from a listing of schools with third grades in Ohio. We excluded private schools and charter schools (known as "community

schools” in Ohio), the latter because of the transient nature of the schools, teachers, and students (24–26). We stratified based upon county and FRPMP enrollment (<50 percent enrolled in FRPMP,  $\geq 50$  percent), then clustered by school. A probability-proportional-to-size approach determined schools randomly selected, with replacement, for each county to generate county-level estimates, which were aggregated to provide state-level estimates. A total of 374 schools were selected, and all third grade students were eligible to be screened in each school. Only those with parental consent were screened. The data were weighted and adjusted for nonparticipation [nonresponse (34 percent) and responders that did not consent (13 percent)], and against FRPMP enrollment and race (White, Black, other) data to reflect the underlying Ohio elementary school student population. The participation rate of 53 percent of all eligible third graders at the sample schools yielded 14,025 children with valid records, representing 126,546 children in the underlying population.

## Analysis

Using survey procedures in SAS 9.1 software (Cary, NC) (27), we computed prevalence and 95 percent confidence intervals. We considered statistical significance to be 95 percent confidence intervals that did not overlap each other. We present additional information on analysis methods according to the three questions we sought to answer.

### Who is a higher risk child?

Using social determinants available from the questionnaire (i.e., FRPMP enrollment, recent dental visit, method of payment for dental care), we generated three estimates of the percentage of higher risk children with dental caries experience and the percentage with untreated caries based on three different definitions of the term “higher risk” and one set of estimates for lower risk children. First, we defined children as being at higher risk for caries only if the parent or guardian who completed the questionnaire reported the child to be enrolled in the FRPMP ( $HR_{FRPMP}$ ). A second group of higher risk children based on ARIs ( $HR_{ARI}$ ) was drawn from those for whom the respondent reported that the child was not enrolled in the FRPMP or that the respondent either did not know or remember the child’s FRPMP enrollment status or did not respond to the question. Of these, only children reported to have Medicaid as payment source or children who were reported to be uninsured for dental care (i.e., self-pay) with no dental visit in the past year were included in the  $HR_{ARI}$  group. A third comparison group was created by aggregating the children in the first two groups ( $HR_{FRPMP+ARI}$ ). Children whose risk status could not be determined because of missing data were eliminated (670 records representing 7,187 chil-

dren). All other children were categorized as lower risk. Therefore, the analyses that involved children at all schools according to individual risk status, as opposed to school risk status were based on 13,300 records representing 119,359 Ohio children in third grade.

### Which are higher risk schools?

We used the state Department of Education’s Interactive Learning Report Card (iLRC) Web-based data site as a source of enrollment data for all schools with third grade students and for FRPMP enrollment (28). Using school-level identification numbers, the data from the Department of Education were merged with the survey data set to generate a school-level indicator for the percentage of students enrolled in FRPMP. Where an individual school-level FRPMP enrollment percentage was missing, we substituted a relevant school in the district. For example, if the FRPMP enrollment percentage was missing on an elementary school, we substituted the associated middle school/junior high FRPMP enrollment percentage. Upon comparing sampled schools with the data for the underlying population of all students obtained from the state Department of Education, we determined that the schools were similar in distribution according to FRPMP enrollment.

We made four separate comparisons, two on the prevalence of dental caries (i.e., experience, untreated) based on direct observation, one on dental insurance status (i.e., Medicaid, private insurance, or self-pay), and one on utilization of dental care (i.e., no dental visit within 1 year). The latter two were based on the questionnaire responses by the parent or guardian. In each comparison, the classification of schools as higher risk or lower risk was in accordance with one of four higher risk thresholds:  $\geq 60$  percent,  $\geq 50$  percent,  $\geq 40$  percent, and  $\geq 30$  percent of children FRPMP-enrolled. We also compared the four groups of higher risk schools with higher risk children ( $HR_{FRPMP+ARI}$ ) at all schools. As a result of our analysis, we chose to use  $HR_{FRPMP+ARI}$  to represent higher risk children to answer the question “Who are higher risk children?”

### What is the impact of various FRPMP enrollment thresholds on the overall proportion of schools and higher risk children eligible for S-BSPs and the number of higher risk children per eligible school?

In Ohio S-BSPs, risk is determined at the school level only. All children in targeted grades are eligible to participate in the selected schools with parental consent. We assessed the programmatic impact of the various thresholds for higher risk school designation by estimating the number of Ohio schools and higher risk children that could be served by S-BSPs based on the four risk thresholds previously identified. For schools,

we estimated the percentage that would be higher risk at each threshold. For children, we estimated for each threshold the percentage that would be higher risk ( $HR_{FRPMP+ARI}$ ). Finally, we calculated the number of higher risk children per school according to each 10 percentage point stratum between  $\geq 60$  percent FRPMP enrollment and  $<30$  percent (i.e., 50-59 percent FRPMP enrollment, 40-49 percent, 30-39 percent).

## Results

We present our findings by risk status at the child level, regardless of the characteristics of the school they attend, and separately at the school level, regardless to whether individual children are higher risk or lower risk. Finally, we analyze the percentage of eligible schools and of higher risk children according to school risk status.

### Who are higher risk children?

Table 1 shows that there was no statistically significant difference in the prevalence of dental caries for higher risk children at all schools when the definition of higher risk was expanded beyond FRPMP alone to include other access-related indicators (i.e., Medicaid enrollment, uninsured children with no dental visit within the past year). The inclusion of children with access-related risk indicators beyond those enrolled in the FRPMP in the definition of “higher risk children” increased the percentage of all third grade children categorized as higher risk from 40.1 percent to 48.1 percent.

### Which are higher risk schools?

Table 2 compares children at higher risk schools and lower risk schools according to four FRPMP-based school-level risk thresholds and to higher risk children at all schools. Regardless of the school-level risk threshold, children at higher risk schools were significantly more likely to have dental caries

experience and untreated caries and less likely to have private dental insurance and a dental visit within the past year than children at lower risk schools. The only statistically significant differences between higher risk schools, based on the respective risk thresholds, related to insurance status for the 60 percent threshold versus the 30 percent threshold. Differences in method of payment for dental care were observed as the FRPMP threshold increased: the percentage of Medicaid consumers increased, private insurance and uninsured decreased.

Children at higher risk schools, regardless of school risk threshold, were not significantly different from higher risk children at all schools with regard to dental caries prevalence or being reported as having a dental visit within a year. There were, however, small differences in caries prevalence between children at lower risk schools and lower risk children at all schools. The prevalence of Medicaid as a payment source could not be compared for higher risk children at all schools because it was a component of the risk definition.

### What is the impact of various FRPMP enrollment thresholds on the overall proportion of schools and children eligible for S-BSPs and the number of higher risk children per eligible school?

Table 3 shows the impact of school-level risk threshold on the percentage of Ohio public schools designated as higher risk and the percentage of all higher risk public school third grade children in the state who are enrolled in those schools. For example, if higher risk schools are defined by the  $\geq 60$  percent of children enrolled in the FRPMP threshold, then higher risk schools represent 23 percent of all Ohio public schools with third grades and 36 percent of all higher risk children ( $HR_{FRPMP+ARI}$ ).

Table 4 shows that the 25 percent drop-off (41.5 to 30.3) between the 40 percent and 30 percent thresholds was the

**Table 1** Prevalence of Dental Caries Experience and Untreated Dental Caries Among Ohio Third Grade Students According to Risk Factors Based on Social Determinants, 2004-2005

Risk status	Risk determinant	Caries experience (%)*	95% CI	Untreated caries (%)†	95% CI
Higher risk ( $HR_{FRPMP}$ )	FRPMP alone <i>n</i> = 47,815	30,639 (64.1)	62.0-66.2	16,518 (34.5)	31.9-37.1
Higher risk ( $HR_{ARI}$ )	ARI alone <i>n</i> = 9,568	5,700 (59.6)	55.4-63.7	3,542 (37.0)	33.4-40.7
Higher risk ( $HR_{FRPMP+ARI}$ )	FRPMP and/or other ARI <i>n</i> = 57,383	36,342 (63.3)	61.4-65.2	20,062 (35.0)	32.7-37.2
Lower risk	Not enrolled in FRPMP and no ARI <i>n</i> = 61,976	29,006 (46.8)	44.2-49.4	10,063 (16.2)	14.5-18.0

\* Percentage of children with one or more decayed, missing, or filled tooth.

† Percentage of children with one or more decayed tooth.

FRPMP, Free and Reduced Price Meal Program; ARI, access-related indicators.

**Table 2** Comparison of Higher Risk and Lower Risk Ohio Schools According to Dental Caries Prevalence, and Access-Related Factors (Insurance Coverage and Utilization of Dental Care) of Third Grade Students; and FRPMP-Based School-Level Higher Risk Standard, 2004-2005

	Dental caries indicators			Insurance status indicator			Dental visit	
	Caries experience (%; 95% CI)	Untreated caries (%; 95% CI)	Medicaid (%; 95% CI)	Uninsured (%; 95% CI)	Private insurance (%; 95% CI)	No dental visit in past year (%; 95% CI)		
Higher risk schools standard								
Higher risk schools ≥60% FRPMP	16,196 (63.9; 59.2-68.5)	8,895 (35.1; 30.0-40.1)	15,373 (65.0; 59.3-70.7)	2,878 (12.2; 8.9-15.5)	5,406 (22.9; 18.4-27.3)	8,483 (33.4; 28.7-38.2)		
Lower risk schools <60% FRPMP	53,351 (52.7; 50.5-55.0)	23,538 (23.3; 21.6-24.9)	21,501 (21.8; 19.3-24.3)	22,563 (22.9; 21.6-24.3)	54,448 (55.3; 52.8-57.8)	19,188 (19.0; 17.3-20.6)		
Higher risk schools ≥50% FRPMP	22,047 (60.6; 57.2-64.1)	12,189 (33.5; 29.7-37.3)	20,121 (58.8; 52.8-64.7)	4,956 (14.5; 11.4-17.6)	9,158 (26.8; 22.6-30.9)	11,673 (32.1; 28.5-35.7)		
Lower risk schools <50% FRPMP	47,500 (52.7; 50.3-55.1)	20,244 (22.4; 20.8-24.1)	16,753 (19.1; 16.6-21.5)	20,485 (23.3; 22.0-24.6)	50,696 (57.7; 55.0-60.3)	15,998 (17.7; 16.0-19.5)		
Higher risk schools ≥40% FRPMP	30,926 (60.7; 58.0-63.5)	17,033 (33.5; 30.5-36.4)	24,628 (50.9; 45.9-55.9)	8,201 (17.0; 14.5-19.4)	15,548 (32.1; 25.6-35.7)	15,361 (30.2; 27.5-32.9)		
Lower risk schools <40% FRPMP	38,620 (51.1; 48.4-53.7)	15,400 (20.4; 18.6-22.2)	12,246 (16.6; 14.3-18.9)	17,240 (23.4; 21.8-24.9)	44,306 (60.0; 57.6-62.5)	12,310 (16.3; 14.6-18.0)		
Higher risk schools ≥30% FRPMP	39,457 (60.5; 58.3-62.7)	20,395 (31.3; 28.7-33.8)	28,614 (45.8; 41.5-50.2)	11,263 (18.0; 16.1-20.0)	22,549 (36.1; 32.8-39.4)	18,325 (28.1; 25.9-30.3)		
Lower risk schools <30% FRPMP	30,090 (49.1; 46.3-51.9)	12,038 (19.6; 17.5-21.8)	8,260 (13.8; 11.7-16.0)	14,177 (23.7; 22.0-25.5)	37,305 (62.4; 59.9-65.0)	9,346 (15.2; 13.6-16.9)		
All higher risk children (HR <sub>FRPMP-ARI</sub> ) at all schools (n = 57,383)	36,342 (63.3; 61.4-65.2)	20,062 (35.0; 32.7-37.2)	N/A	10,871 (19.5; 17.3-21.8)	8,010 (14.4; 12.8-15.9)	20,348 (35.7; 34.1-38.5)		
All lower risk children at all schools (n = 61,976)	29,006 (46.8; 44.2-49.4)	10,063 (16.2; 14.5-18.0)	N/A	12,796 (20.6; 19.1-22.2)	49,180 (79.4; 77.8-80.9)	4,189 (6.8; 5.7-7.8)		

FRPMP, Free and Reduced Price Meal Program; ARI, access-related indicators; N/A, not applicable.

steepest observed between the 10 percentage point tiers of FRPMP enrollment.

## Discussion

This report should provide useful information for those who plan S-BSPs as a population-based approach to dental caries prevention. Having accepted that S-BSPs are effective and are best targeted to ultimately reach high proportions of higher risk children, the question becomes how to most effectively distribute resources to do so. In Ohio, that target is accomplished at the school level rather than at the individual child level. Contrary to other publications that have addressed elements of S-BSP design, once the determination has been made about which schools will have the program (3,11,12), we have addressed a more basic question of targeting criteria for schools.

This study appears to be the first to distinguish higher risk children from the higher risk schools that sealant programs target to reach them. While the definition of higher risk schools has been implied by the FRPMP-based enrollment thresholds reported by the states (9,13), there has been no such definition of higher risk students from the perspective of S-BSPs.

In Ohio, the State Health Department has determined that child-level eligibility criteria are unacceptable to school administrators, who believe that the use of such criteria stigmatizes children. Therefore, school-level criteria are the best means to target programs. In a state or locale where it is acceptable to offer services only to children with demographic indicators such as Medicaid or FRPMP enrollment, the definition of higher risk could change and issues around school-level targeting may be less important.

Available funding will drive public health agency decisions about balancing maximum access (lower threshold percentage of children enrolled in the FRPMP at school) with efficiency (highest number of higher risk children served per school). Programs must ask “at what point is the effort and expense of visiting additional schools with fewer higher risk children per school no longer worth the benefit of reaching more higher risk children through sealant programs?” The point of diminishing returns will vary with the resources and perceptions of agencies that operate S-BSPs and those that fund such programs on a larger scale, such as state health departments. Not surprisingly, our analysis implies that S-BSPs would have the best yield in terms of reaching higher risk children by first targeting schools with the highest percentage of enrollment in FRPMP and lowering the higher risk school threshold as program resources permit.

For the Ohio state dental program’s purpose of designing its statewide S-BSP, the three key questions were answered in the succeeding sections:

**Table 3** Number and percentage of Ohio Public and Community Schools with Third Grades and Higher Risk Third Grade Children According to School-Level “Higher Risk” Threshold, 2004-2005

School-level “higher risk” threshold (% enrolled in FRPMP)	Number of all schools that are higher risk <i>n</i> = 1,960 (%)	Number of all HR <sub>FRPMP+ARI</sub> children captured <i>n</i> = 57,381 (%)
≥60	448 (22.8)	20,673 (36.0)
≥50	614 (31.3)	28,155 (49.1)
≥40	800 (40.8)	35,878 (62.5)
≥30	1,062 (54.2)	43,807 (76.3)

FRPMP, Free and Reduced Price Meal Program.

### Who is a higher risk child?

Those whose parents reported that they were enrolled in the FRPMP, Medicaid, or both, and those who were reported to be uninsured and had no dental visit in the past year.

#### Rationale

This definition is based on social determinant information that utilizes two means-tested programs plus a third group – uninsured with no dental visit – that incorporate two indicators frequently linked to access to dental care (7,29-32). While the inclusion of the third group created the possibility for misclassifying children of affluent parents who happened to be uninsured and did not have a dental visit in the past year, we found that the prevalence of untreated caries for the uninsured – no visit subset – who accounted for only eight percent of the higher risk group – was not statistically different from that of the other subsets of the higher risk group. Furthermore, the prevalence of untreated caries for each of the three subsets of the higher risk group was significantly different from the lower risk group.

### Which are the higher risk schools?

Those with at least 40 percent of the students enrolled in the FRPMP.

#### Rationale

This threshold was selected because: a) Ohio’s S-BSP infrastructure already had demonstrated the capacity to expand beyond the 50 percent threshold it had used for a number of years; b) the data demonstrated that children at higher risk schools according to the 40 percent FRPMP enrollment threshold were significantly more likely to have dental caries than lower risk children; and c) because the average number of higher risk children per school was reasonable.

### What is the impact of various FRPMP enrollment thresholds on the overall proportion of schools and higher risk children eligible for S-BSPs?

The yield of higher risk children per school does not justify lowering the eligibility threshold to 30 percent FRPMP enrollment.

#### Rationale

While a decline in the average number of potentially eligible higher risk children per school was observed as the FRPMP-based threshold was lowered, the drop was not large for the aggregate of the schools (i.e., 46.2 higher risk children per school for ≥60 percent FRPMP enrollment to

**Table 4** Mean Number of Higher Risk Third Grade Children per School in Ohio Public and Community Schools with Third Grades According to Percentage of Children Enrolled in the Free and Reduced Price Meal Program, 2004-2005

Percentage of children eligible for FRPMP	Number of higher risk schools ( <i>n</i> = 1,960)	Children ( <i>n</i> = 119,359)	
		Number of all higher risk children	Mean number of higher risk children per school
≥60	448	20,673	46.1
50-59	166	7,482	45.1
40-49	186	7,723	41.5
30-39	262	7,929	30.3
<30	898	13,574	15.1

41.2 for  $\geq 30$  percent). However, examining the decline by 10 percentage point tiers, the drop between 40-49 percent FRPMP enrollment (41.5 higher risk children per school) to 30-39 percent (30.3 higher risk children per school) was dramatic at nearly three times the drop from 50-59 percent FRPMP enrollment (45.1 higher risk children per school) to 40-49 percent.

There are some limitations on the findings of our analysis. First, our findings are for Ohio public school children only. This analysis reflects the demographics and oral health status of Ohio children, which may differ from children in other states. As with all such surveys that require parental consent, the validity of the data may be compromised by the response rate. The weighting of the data in this analysis should have mitigated that limitation. School-based sealant programs typically target one grade level to reach first permanent molars and another for second molars. This survey only included one grade level. Information on FRPMP enrollment, insurance status, and most recent dental visit are self-reported. To the extent that caregivers completing consent form/questionnaires were inaccurate in their responses, the findings would change. As reported elsewhere, however, our survey estimates for Medicaid enrollment and FRPMP-enrollment were found to be consistent with actual data from those programs.<sup>20</sup>

While our findings may be of interest to planners of a state-wide strategy for increasing sealant prevalence in higher risk populations through S-BSPs, they may be of less use to local programs in smaller service areas that need to have a critical mass of schools in order to have a viable S-BSP. Furthermore, local programs may be subject to other pressures for targeting programs, such as dentist support and the desires of school administrators.

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