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Program Evaluation: North Dakota Department of Health Seal!ND 2018-2019

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Program Description

The North Dakota Department of Health (NDDoH) Oral Health Program (OHP) is committed to improving the oral health of North Dakotans through prevention and education by using innovative and cost-effective approaches to promote oral health care. The OHP functions as the "backbone" organization for public oral health services in North Dakota. The OHP seeks to foster community and statewide partnerships to improve oral health and enhance access to dental care. One successful program that illustrates how the NDDoH is achieving this goal is Seal!ND.

According to the Centers for Disease Control and Prevention (CDC, 2017), in the United States, cavities are one of the most common chronic conditions in children. If left untreated, cavities can cause pain and infections that could result in eating, speaking, learning, and playing difficulties (Jackson et al., 2011). Fortunately, cavities are preventable. One way to help prevent cavities is to apply dental sealants to permanent molars (back teeth) of children. "Dental sealants are thin plastic coatings that are applied to the grooves on the chewing surfaces of the back teeth" (CDC, 2017). Studies have found that sealants reduce cavities by "81 percent for two years after they are placed on the tooth and continue to be effective for four years after placement (CDC, 2017).

Seal!ND is a school-based dental sealant program that provides preventive oral health care to low-income and underserved children in North Dakota. Schools with a high percentage of children enrolled in the free and reduced-price school lunch program are targeted for participation in the school-based sealant program. Enrollment in the free and reduced-price school lunch program provides a reliable metric for identifying schools with a higher percentage of low-income households.

The OHP provides dental screenings, oral health education, dental sealants, and fluoride varnish application with retention checks in the spring prior to the end of the school year to monitor outcomes. In addition, Seal!ND identifies students with additional oral health care needs and refers them to local dental providers for treatment.

Program objectives are to increase program infrastructure and capacity, to increase the percentage of children with dental sealants, decrease the percentage of children with untreated tooth decay, and increase the percentage of children that have a dental home[1]. The North Dakota OHP Logic Model details program inputs, activities, and outcomes (Appendix A). The school-based dental sealant program seeks to ensure that all children receive highly effective preventive treatment through a proven community-based approach.

[1] A dental home is defined by the American Academy of Pediatric Dentistry as "the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way". For more information, visit: https://www.aapd.org/research/oral-health-policies--recommendations/Dental-Home/.

Program Background

Seal!ND was launched in the 2012-13 school year. In the first year of the program, 43 schools participated. Due to the loss of funding from the Health Resources and Services Administration (HRSA) grant, Seal!ND was available in only two schools in 2013-14. Funding was restored in 2014-15. While HRSA originally supported the program, it was known from the onset that alternate funding would eventually be required to continue to support the program. HRSA awards support new programs but HRSA does not provide long term funding for ongoing operations.

Starting in 2017-18 the program was supported by a new funding mechanism. A collaboration between the OHP and the ND Medicaid office was instrumental in identifying a potential avenue to address sustainability for the OHP's school-based sealant program, Seal!ND. Beginning in 2016, the OHP and the ND Medicaid office began a collaboration which resulted in the approval of billing Medicaid for sealants and fluoride varnish treatments provided in school-based sealant programs starting in 2017-18. For a complete description of the OHP partnership activities see Hodur and Gao, 2018. North Dakota is one of only a few states in which health departments bill Medicaid for the application of sealants and fluoride varnish treatments in schools. For students that do not qualify for Medicaid, services are provided at no charge.

While work was ongoing to gain approval of Medicaid billing prior to the 2017-18 school year, the OHP was also working to encourage private practice providers to offer school-based sealant programs. Several obstacles have historically deterred private practices from providing such programs. One of those barriers to entry is the cost of portable equipment. Another is the widely held perception that the school sealant business model is not financially viable.

To address the lack of equipment, the OHP has used multiple funding sources to purchase equipment and supplies. For example, the OHP purchased portable dental equipment to be used by private practice dentists. The use of the portable equipment is an incentive for Federally Qualified Health Centers (FQHCs) and private practice providers to partner with the OHP to provide school-based sealant programs. Medicaid billing for school-based sealant programs and efforts to encourage private practice providers to offer school-based sealants has helped to overcome perceptions related to financial feasibility (Hodur and Gao, 2018).

Private practice providers and FQHCs enter a Memorandum of Understanding (MOU) with the OHP. The MOU stipulates conditions for use of equipment and other aspects of the program, such as data collection and reporting requirements. Private practices must collect the same screening data as the public health hygienist and provide those screening sheets to the OHP. Data are collected to track performance measures.

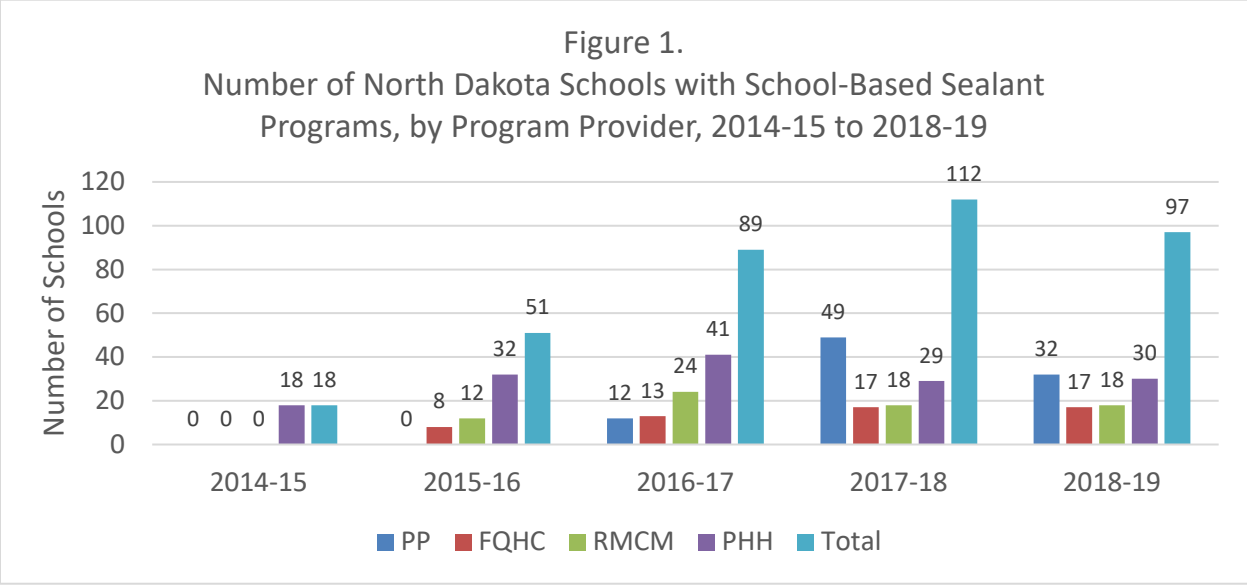
In addition to Seal!ND dental providers, the Ronald McDonald Care Mobile (RMCM) also offers school-based sealant programs that bill Medicaid for services. There is no formal relationship between the OHP and the RMCM, although the organizations communicate to avoid duplication. Evaluation findings are only reported for the activities of the OHP public health

hygienists, private practice providers, and FQHCs and do not include performance measures from the RMCM.

The number of schools participating in sealant services and the entities that provided the services are detailed in Table 1 and Figure 1. In 2018-19, 97 schools had school-based sealant programs. Seal!ND had school based sealant programs in a total of 79 schools (e.g., private practice providers had school-based sealant programs in 32 schools, FQHCs provided school-based programs in 17 schools, and public health hygienists served 30 schools). An additional 18 schools were served by the RMCM.

Table 1. Number of North Dakota Schools with School-Based Sealant Programs, by Program Provider, 2014-15 to 2018-19

	2014-15	2015-16	2016-17	2017-18	2018-19
	----------number----------				
Private Practice Providers (PP)	0	0	12	49	32
Federally Qualified Health Centers (FQHC)	0	8	13	17	17
Ronald McDonald Care Mobile (RMCM)	0	12	24	18	18
ND Department of Health Public Health Hygienist	18	32	41	29	30
Total	18	51	89	112	97



Free and Reduced-Price Lunch Program

Student participation in the free and reduced-price lunch program provides a reliable metric for identifying schools with a higher percentage of low-income households. Children from low-income households are typically at higher risk for tooth decay (cavities) and may lack access to

dental care (CDC, 2017). Seal!ND works closely with the North Dakota Department of Public Instruction (DPI) to identify schools with 45 percent or more of students enrolled in the free and reduced-price lunch program. Schools represent an opportune channel for reaching underserved and vulnerable children with public health messaging, education, and direct services to advance oral health. Table 2 details the number of North Dakota schools by the percentage of students enrolled in the free and reduced-price lunch program. In 2018-19, there were 115 schools with at least 45 percent of students enrolled in the free and reduced-price lunch program (Table 2).

Table 2. Number of North Dakota Schools, by Percentage of Students Enrolled in the Free and Reduced-Price Lunch Program, 2014-15 to 2018-19

Percentage of Students Enrolled in the Free and Reduced-Price Lunch Program	2014-15	2015-16	2016-17	2017-18	2018-19
	----------number----------				
0-14 percent	56	49	44	44	49
15-29 percent	146	151	140	151	146
30-44 percent	113	112	108	104	104
45-59 percent	33	44	58	54	54
60 percent or more	43	54	54	60	61
Total Schools Participating in FRL Program	391	411[1]	412[1]	413	414
Total Schools in North Dakota	475	480	481	483	482

[1]Does not sum to total as some schools did not report free and reduced-price enrollment rates due to privacy concerns. Schools that do not report are generally specialized facilities with small enrollments, such as residential juvenile treatment centers. All students at those facilities are eligible for the free and reduced-price lunch program.
Data Source: https://www.nd.gov/dpi/data/directory/
https://www.nd.gov/dpi/SchoolStaff/ChildNutritionFoodDistribution/SchoolDistrictData/

In 2018-19, most schools with Seal!ND school-based sealant programs had 45 percent or more of students enrolled in the free and reduced-price lunch program. However, some schools served by private providers and FQHCs did fall below the 45 percent enrollment threshold. Of the 79 schools served by the OHP school-based sealant program in 2018-19, 48 schools had at least 45 percent of students enrolled in the free and reduced-price lunch program (Table 3). Only those 48 schools are included in analysis of school sealant data beginning with Figure 2 through Figure 10 in the Findings section.

Table 3. Number of North Dakota Schools, by Percentage of Students Enrolled in the Free and Reduced-Price Lunch Program, by Program Provider, 2018-19			
Percent of Students Enrolled in the Free and Reduced-Price Lunch Program	Private Practice Providers (N=32)	FQHCs (N=17)	Public Health Hygienist (N=30)
0-14 Percent	7	0	0
15-29 Percent	8	1	0
30-44 Percent	13	2	0
45-59 Percent	3	8	22
60 Percent or More	1	6	8
Mean Percentage	29.5%	56.0%	60.6%

Evaluation Methodology

The OHP program contracts with the North Dakota State University (NDSU) Center for Social Research (CSR) for program evaluation. The evaluation of Seal!ND focused on two key indicators; the number of averted cavities and feedback from administrators in participating schools from a self-administered online questionnaire.

Evaluation Methodology Averted Cavities

To quantify the benefits of the school-based sealant program, the CSR used a methodology developed by the CDC to calculate the number of averted cavities attributable to school-based dental sealant programs like Seal!ND (Griffin et al. 2014). Dental hygienists collect data on the number of students screened, number of teeth sealed, and number of teeth with cavities, as well as relevant demographic data such as age and grade level of children that participate in the program. The number of cavities prevented was calculated using the weighted average attack rate (annual risk for tooth decay in the absence of school sealants) and the sealant retention rate (the percentage of sealants that stayed intact for 12 months). The weighted average one-year attack rate was 6.16 percent in 2018-19, calculated using methods as described in Griffin et al. 2014 (Table 4). The attack rate is defined as the annual probability of developing a cavity in a sound first molar not treated with a sealant. The one-year sealant retention rate of 89 percent was based on secondary data as reported in Griffin et al. 2014.

Table 4. Average Annual Attack Rate, 2014-15 to 2018-19					
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Attack rate	12.57	5.99	10.16	5.31	6.16

Evaluation Methodology Participating Schools Survey

To further gauge program effectiveness, key stakeholders from participating school districts were surveyed to assess the program's efficiency and to provide useful feedback to assess

program strengths and opportunities for improvement. The CSR designed the questionnaire with input from the OHP. Beginning with the 2014-15 school year, the self-administered survey was distributed annually to school administrators, support personnel, and others at participating schools that worked with the program and the dental providers that provided screenings and applied sealants. The survey was designed to evaluate program effectiveness and how OHP staff interacted and collaborated with participating schools. Data collected from the survey of program contacts at participating schools were analyzed using standard widely accepted descriptive statistics to address key evaluation questions related to the school's experience with the sealant program and the public health hygienist that provided services.

For study period 2018-19, the North Dakota Oral Health Prevention Coordinator sent invitations to 92 individuals at 79 participating schools requesting they complete a brief questionnaire. Four subsequent reminders were sent and ultimately 64 individuals completed the survey for a 69.6 percent response rate. The response rate was better than the 2017-18 response rate of 56.7 percent; however, response rates were higher in previous years with 94.4 percent in 2014-15, 95.0 percent in 2015-16, and 73.8 percent in 2016-17.

Respondents were asked their level of agreement with a number of statements. The questionnaire used a five-point Likert scale where 1 is "Strongly Disagree" and 5 is "Strongly Agree" to gauge the participating school's experience with the dental sealant program. The same five-point Likert scale was used to calculate an average score of all respondents to further gauge respondents' level of agreement with various statements. In previous years the questionnaire also included four open-ended questions that solicited additional feedback about the program, suggestions for program improvement, and how to increase program participation. In 2018-19 the questionnaire was modified to replace the open-ended questions with Likert scale questions to improve response and feedback. Responses from the open-ended questions in previous years' questionnaire were used to develop the new questions.

Findings

Estimates of averted cavities and Seal!ND participating school survey results are reported in the following sections.

Annual Measures and Cavities Averted

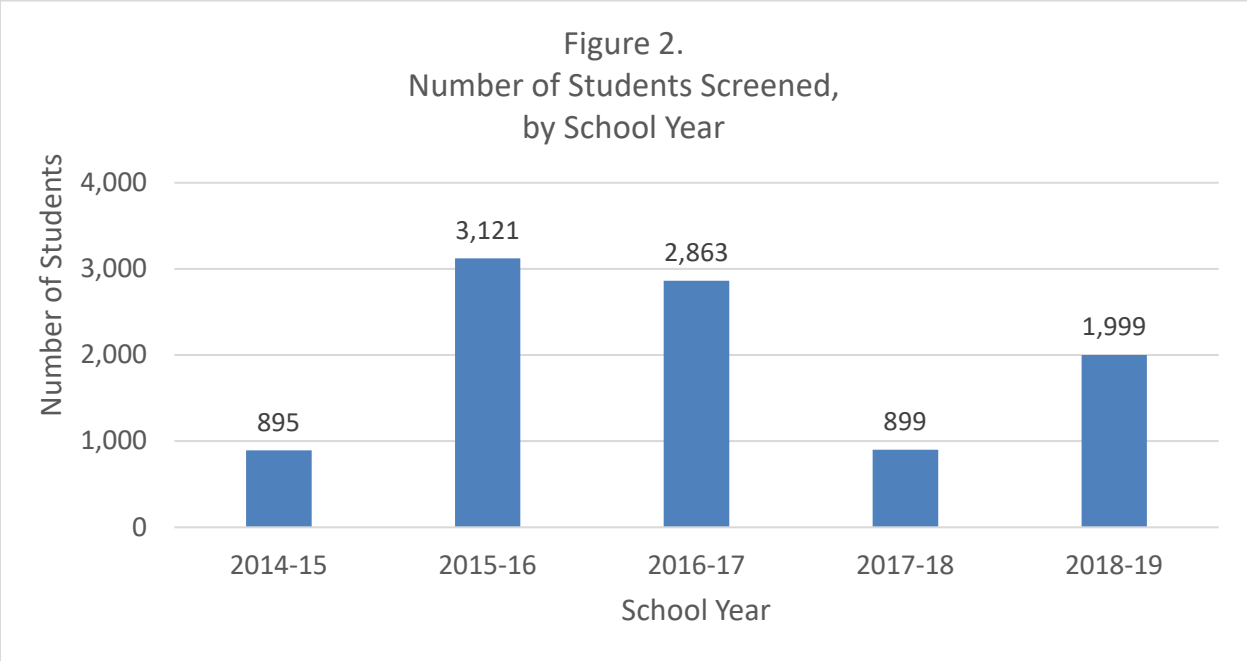
The number of students screened and the number of cavities averted are reported in the following sections.

Student Demographics

Seal!ND has expanded considerably since the 2014-15 school year, the first year of the evaluation period and the first year of the program after funding was restored. In 2014-15, 18 schools participated. The number of participating schools increased to 40 in 2015-16 and 41 in 2016-17. In 2017-18, findings focused on only the 29 schools that had a school-based sealant program administered by the OHP's public health hygienists. In 2018-19, findings are reported for 48 schools that met the free and reduced-price lunch criteria and had a school-based

sealant program administered by either a public health hygienist, a private practice provider, or FQHC.

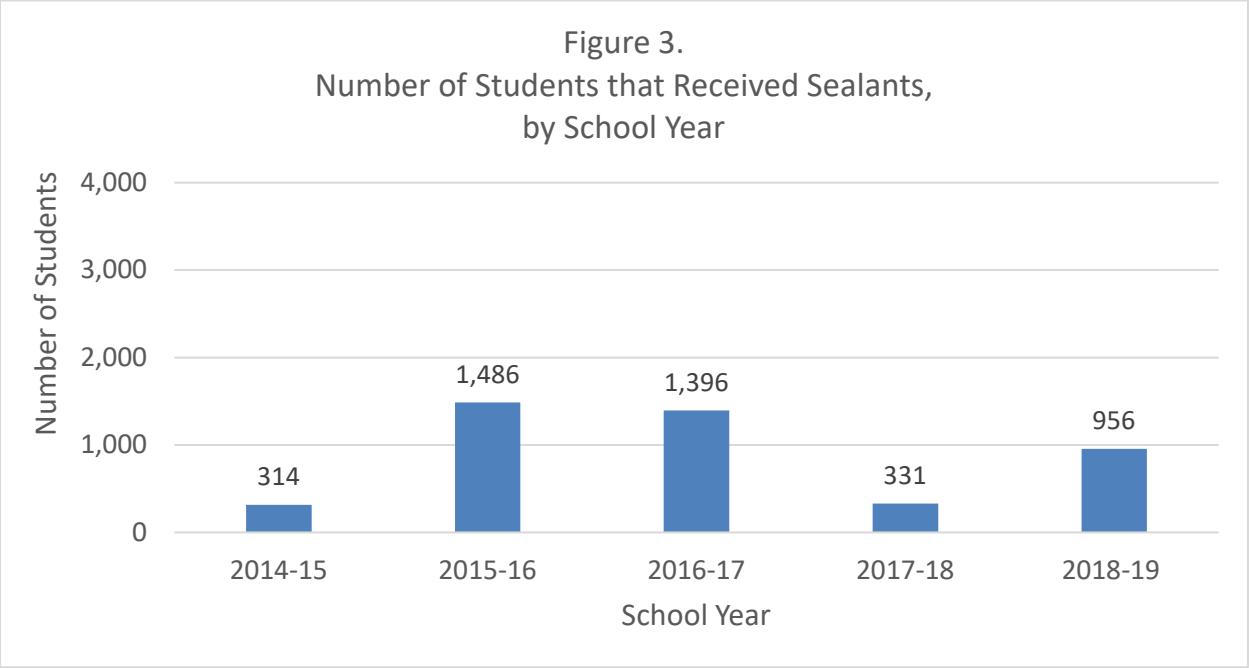
In 2014-15, 895 children were screened. The number of students screened increased to 3,121 in 2015-16 and 2,863 in 2016-17 and declined to 899 children in 2017-18 (Figure 2). The number of children screened more than doubled in 2018-19, increasing to 1,999[2]. The reason for the steep decline and subsequent dramatic increase was a function of reporting. While it would appear that the program dropped off substantially in 2017-18 and rebounded in 2018-19, the increase, like the previous year's decline, was due to reporting. In 2017-18 only those schools with a program administered by a public health hygienist were included. Data from private practice providers or FQHCs were not included in the analysis. In 2018-19 the number of students screened, regardless of provider, that had a school-based sealant program where 45 percent or more of students were enrolled in the free and reduced-price lunch program were included in the assessment. This reporting inconsistency influenced all performance metrics reported throughout similarly.



Trends were similar for the number of children who received sealants as the number of students screened. With the substantial increase in the number of participating schools in 2015-16, the number of students that received sealants increased from 314 in 2014-15 to 1,486 in 2015-16. In 2016-17, 1,396 students received sealants. Since data for 2017-18 include only screenings from public health hygienists, the number dropped to 331 students receiving

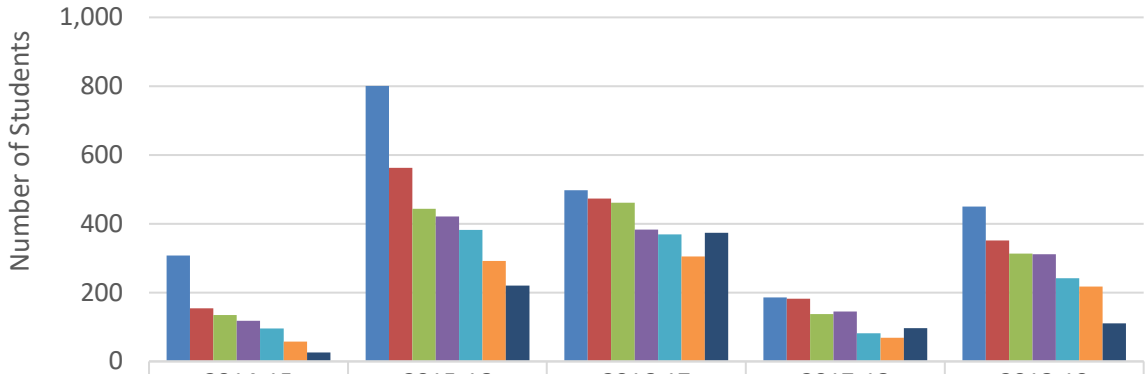
[2] Of the 1,999 student observations in 2018-19, 40 were missing screening data. Reasons for missing screening data include student absence from school for either the fall screening or spring retention check, the family moved, or the child was uncooperative. Observations with missing screening data do not impact the calculation of retention rates, the attack rate, or cavities averted. This is consistent with previous years' assessments.

sealants that year. In 2018-19, the number of students receiving sealants nearly tripled to 956 (Figure 3).



For each program year, more Kindergarten and Pre-Kindergarten (Pre-K) students were screened than any other grade. In 2014-15, 308 Kindergarten and Pre-K students were screened (Figure 4). The number of students screened in other grades ranged from 26 to 154. Trends were similar in 2015-16 when more Kindergartners and Pre-K students were screened than students in other grades. Screenings per grade were more uniform in 2016-17 ranging from 498 Kindergarten and Pre-K students screened to 305 students in fifth grade as well as 374 students in sixth grade or higher. First grade students were the second most frequently screened through all the five years. Similar to previous years, in 2018-19, students that were screened were more frequently in Pre-K and Kindergarten (n=450) than in grades six or higher (n=111). Declining program participation in higher grades is consistent with CDC best practices. CDC best practice guidelines report program participation typically drops in higher grades (CDC, 2017).

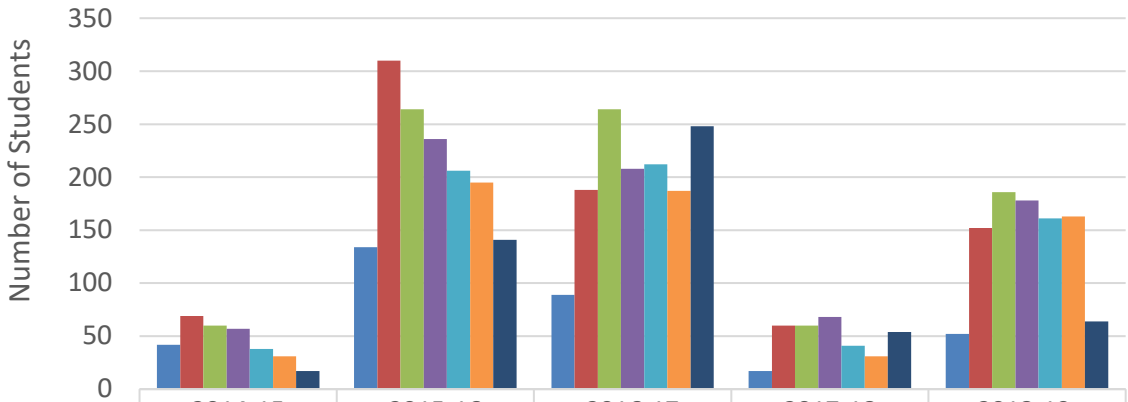
Figure 4.
Number of Students Screened,
by Grade, by School Year



	2014-15	2015-16	2016-17	2017-18	2018-19
Kindergarten and Pre-K	308	801	498	186	450
1st Grade	154	563	473	182	352
2nd Grade	135	444	461	138	313
3rd Grade	118	421	383	145	312
4th Grade	96	382	369	82	242
5th Grade	58	292	305	69	218
6th Grade and Higher	26	220	374	97	111

The application of sealants is most effective if applied soon after first molars emerge, when children are six to seven years old (Macek et al. 2003), which is about when children are in grades one or two. Generally, as students progress to higher grades, the number of students that have sealants applied declines. This is consistent with best practices for school-based sealant programs. In 2018-19, the number of students with sealants applied was somewhat similar from grades one through five, ranging from 152 to 186. The number dropped to 64 students in grade six or higher (Figure 5).

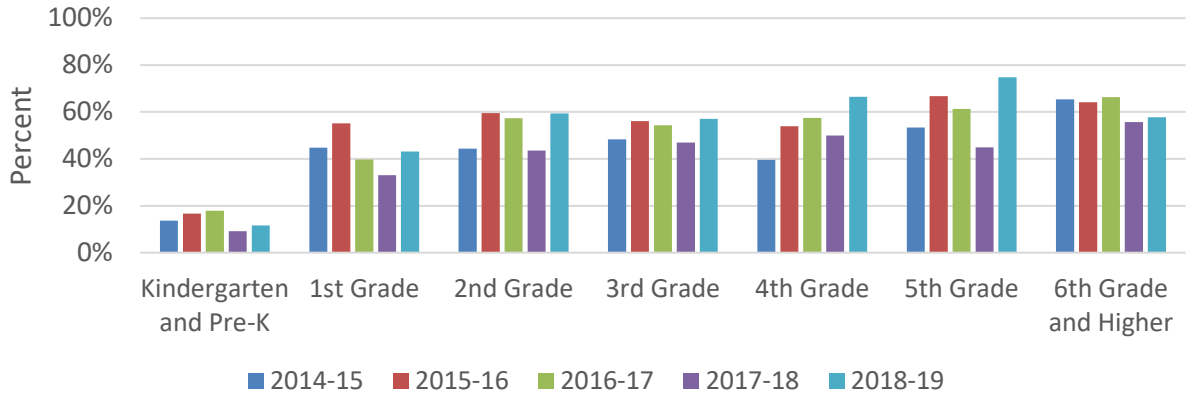
Figure 5.
Number of Students with Sealants Applied,
by Grade, by School Year



	2014-15	2015-16	2016-17	2017-18	2018-19
Kindergarten and Pre-K	42	134	89	17	52
1st Grade	69	310	188	60	152
2nd Grade	60	264	264	60	186
3rd Grade	57	236	208	68	178
4th Grade	38	206	212	41	161
5th Grade	31	195	187	31	163
6th Grade and Higher	17	141	248	54	64

The percentage of students who receive sealants offers some perspective on overall student participation in the program and to what degree the program is reaching the target audience, including low-income and underserved populations. The percentage of children in participating schools in grades one through five with sealants applied ranged from 40 to 53 percent of all students in each corresponding grade in 2014-15 (Figure 6). In the two subsequent years, the percentage of children with sealants applied in grades one through five ranged from 40 to 67 percent. Higher percentages were reported in 2018-19 for the same grades with 44 to 75 percent of first through fifth graders receiving sealants through the program. Fewer students in Kindergarten and Pre-K received sealants in all five program years, ranging from 9 to 18 percent. Fewer children with applied sealants in Kindergarten and Pre-K is likely a function of the fact that for many in Kindergarten and Pre-K, first molars have not yet errupted.

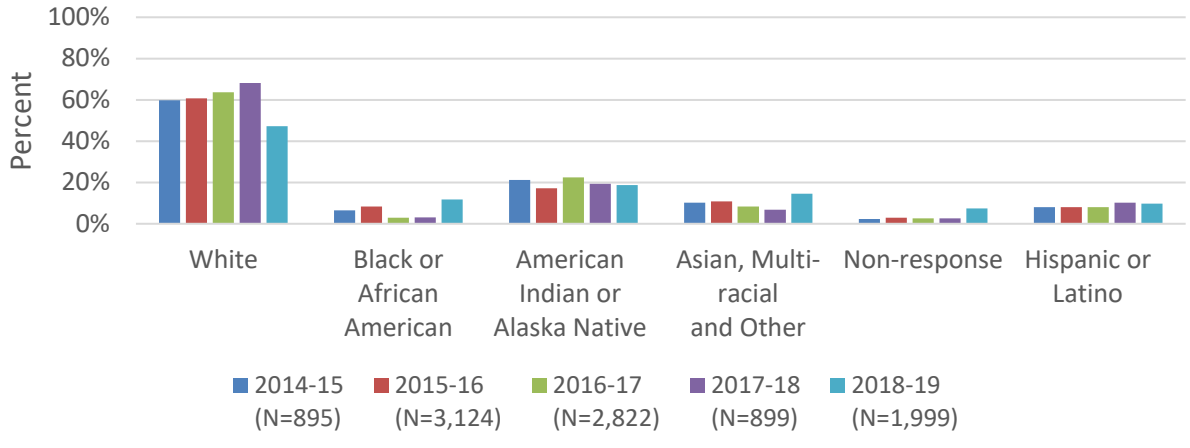
Figure 6.
Percentage of Students with Sealants Applied, by Grade, by School Year



Program Target Audience

One of the goals of the school-based sealant program is to reach children that are high-risk based on socio-economic status, which frequently includes racial minorities. While a majority of students who participated in the school-based sealant program were white, the program served a greater percentage of minority students than the overall child population distribution of the state. Over the five-year study period, an average of 60 percent of the children screened were white, 20 percent were American Indian, and 7 percent were Black or African American. Additionally, 8 percent of students were Hispanic or Latino (of any race) (Figures 7 and 8).

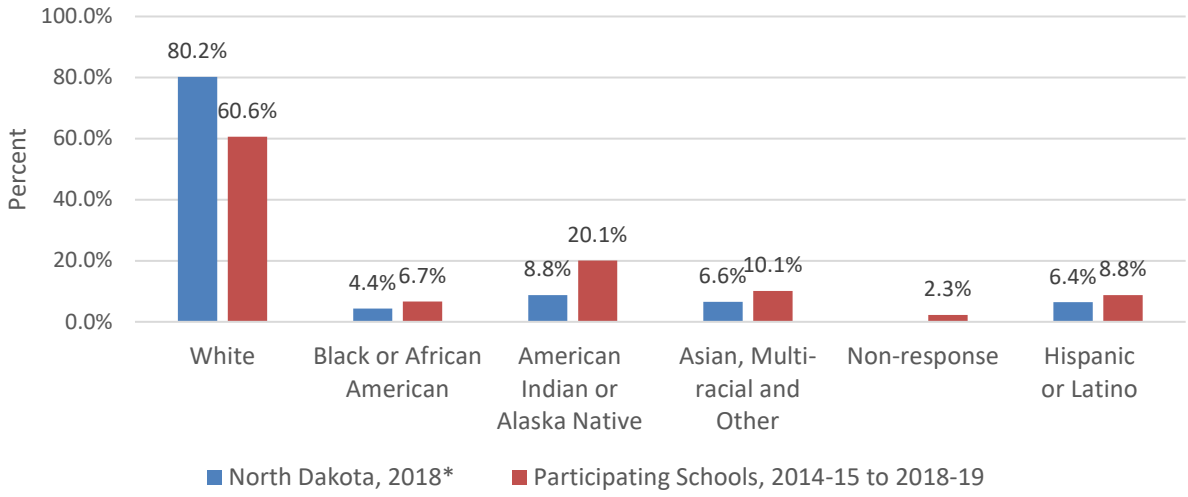
Figure 7.
Percentage of Students Screened, by Race and Hispanic Origin, by School Year



Note: The categories in Figure 7 are not mutually exclusive as racial categories are inclusive of Hispanic origin. In addition, the Hispanic origin category reflects students of any race.

The students that participated in the school-based sealant program are more racially diverse than the state's child population overall. Over the course of the five-year program period, participating minority students are represented at levels exceeding the overall statewide racial distribution of children. American Indian children represented 9 percent of all children statewide in 2018, yet they represented 19 percent of program participants for 2018-19 (Figure 7 and Figure 8). Minority students in other racial and ethnic groups were represented at higher rates than the child population statewide. The program also served slightly higher percentages of Black, Asian, Hispanic or Latino, and multi-racial students than the statewide population. This would suggest the program is effectively targeting racial minorities who are more frequently low income and whose oral health care needs are often underserved.

Figure 8.
Population by Race and Hispanic Origin for Children in North Dakota, 2018, and Participating Schools, 2014-15 to 2018-19



Notes: The categories in Figure 8 are not mutually exclusive as racial categories are inclusive of Hispanic origin. In addition, the Hispanic origin category reflects students of any race. *Numbers obtained from the U.S. Census Bureau, Population Estimates Program, Annual Estimates of the Resident Population by Sex, Age, Race, and Hispanic Origin for the United States and States: April 1, 2010 to July 1, 2018.

Molars Sealed and Cavities Averted

Consistent with the change in number of schools directly served through the Seal!ND program from year to year, the number of first molars sealed totaled 939 in 2014-15, 4,390 in 2015-16, 3,799 in 2016-17, 887 in 2017-18, and increased to 2,485 in 2018-19 (Figure 9, Table 5).

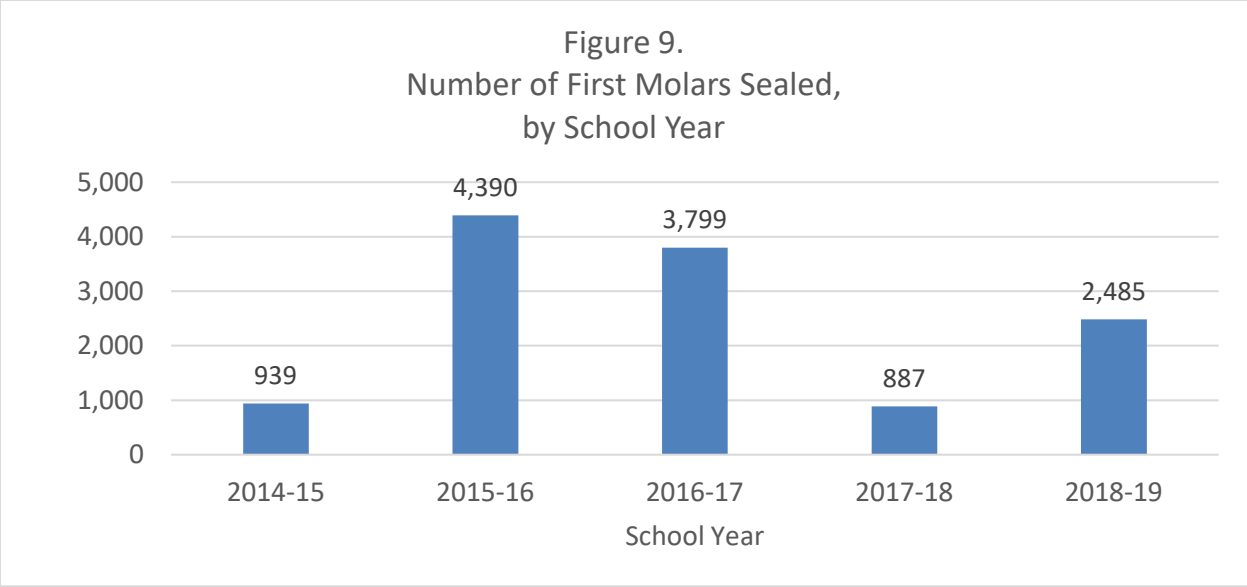


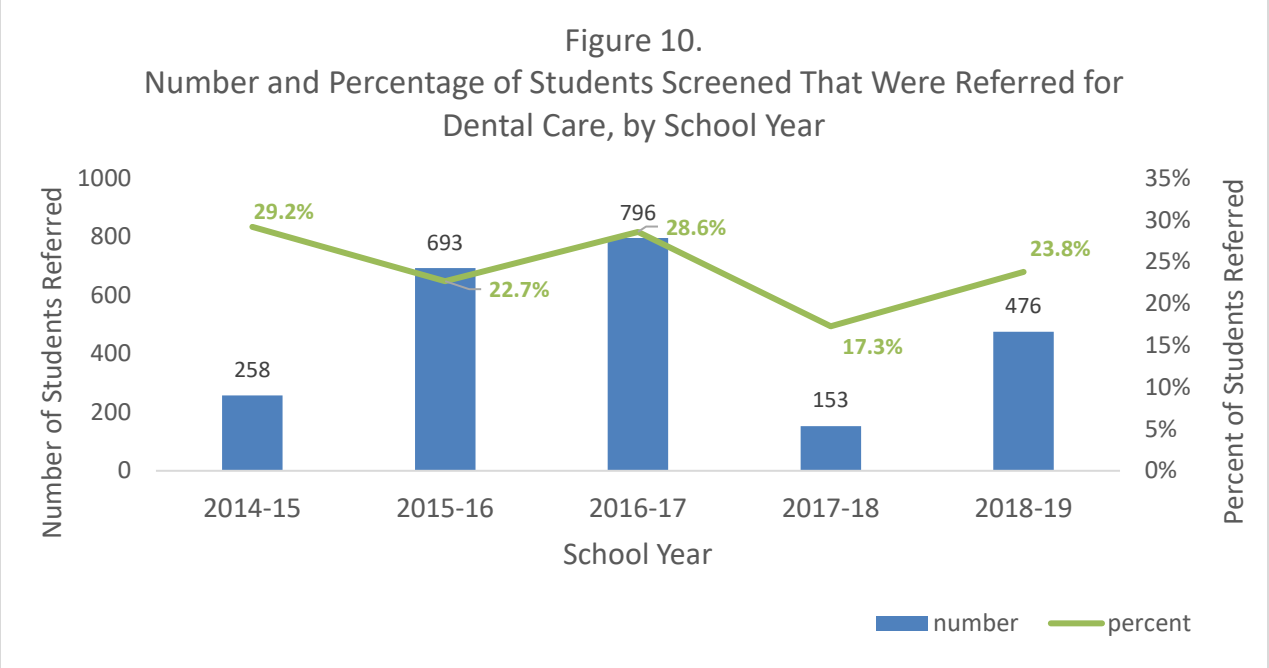
Table 5. Summary of Services Delivered, by School Year

Item	School Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
Number of participating schools	18	40	41	29	48
Number of students screened	895	3,121	2,863	899	1,999
Number of students that received sealants	314	1,486	1,396	331	956
Percentage of students screened with sealants applied	35.0%	47.6%	48.8%	36.8%	47.8%
Number of 1st molars sealed	939	4,390	3,799	887	2,485
Number of 1st molars, 2nd molars, and other teeth sealed	1,257	6,452	6,122	1,399	3,879
Total number of students with sealants	531	2,118	1,997	582	1,307
Percentage of students with sealants	59.2%	67.8%	69.8%	64.7%	65.4%

Seal!ND dental screenings also identify students with untreated cavities and refers them to local providers for treatment and dental care. About half of screened students each year were identified as having tooth decay (treated or untreated). More specifically, about one-fourth of students screened had untreated decay (26% in 2018-19). Dental providers referred 24 percent of students for further dental care and about 4 percent of students were referred for urgent care in 2018-19 (Table 6, Figure 10).

Table 6. Summary of Children Screened with Treated and Untreated Decay, and Referred for Treatment, by School Year										
	2014-15		2015-16		2016-17		2017-18		2018-19	
	%	n	%	n	%	n	%	n	%	n
Students with treated or untreated decay	55.2	486	52.0	1,582	57.5	1,593	51.5	455	49.2	869
Students with treated decay	37.9	334	38.4	1,167	42.3	1,174	39.4	348	27.9	495
Students with untreated decay	29.8	262	23.2	707	29.0	805	19.0	168	25.9	480
Students referred for dental care*	29.2	258	22.7	693	28.6	796	17.3	153	23.8	476
Students referred for immediate treatment (Urgent care)	1.5	13	3.1	93	3.7	103	5.9	52	3.7	72
Students referred for early dental care (Restorative care)	27.8	245	19.7	600	25.0	693	11.4	101	20.8	404
Number of students screened	882		3,043		2,775		884		1,999	

*Students referred for dental care is the sum of students referred for Urgent Care and Restorative Care.



It was estimated that the school-based dental sealant program sponsored by the OHP prevented decay in 423 permanent molars in 2014-15, 1,235 in 2015-16, 1,524 in 2016-17, 228 in 2017-18 and 688 in 2018-19 (Table 7).

Stated another way, in 2018-19 for every 3.6 molars sealed, one cavity was prevented. The ratio of molars sealed per cavities prevented was similar in 2015-16 (3.6) and 2017-18 (3.9) and lower in 2014-15 (2.2) and 2016-17 (2.5) (Table 7).

The average cost to fill a typical cavity was based on North Dakota Medicaid private practice reimbursement rates. As of July 1, 2018, the private practice reimbursement rate for one surface amalgam was $77.50 (North Dakota Department of Human Services, 2018). Using the reimbursement rate for a single surface amalgam will produce a conservative estimate as treatment for more advance decay would be reimbursed at a higher rate.

Total avoided cost from cavity prevention as a result of the application of sealants was $31,827 in 2014-15. Avoided costs increased in the subsequent years to $95,713 in 2015-16 and $118,110 in 2016-17. The avoided costs decreased to $17,670 in 2017-18. Avoided costs tripled in 2018-19 compared with the previous year, increasing to $53,320. Total averted costs over the five-year study period were $316,640 (Table 7).

Table 7. Summary of Prevented Decay and Avoided Costs, by School Year

	School Year				
Item	2014-15	2015-16	2016-17	2017-18	2018-19
Prevented decay in permanent molars	423	1,235	1,524	228	688
Ratio of number of molars sealed per cavities prevented	2.2	3.6	2.5	3.9	3.6
Avoided cost from cavity prevention per avoided caries	$75.24	$77.50	$77.50	$77.50	$77.50
Total avoided costs	$31,827	$95,713	$118,110	$17,670	$53,320

Seal!ND Participating School Survey

Findings from the participating school survey are detailed in the following sections. As detailed in the methods section, survey respondents were school administrators who coordinated and administered program activities for the participating schools.

Dental Sealant Program

The survey respondents' level of agreement with statements related to the school's experience with the dental sealant program are detailed in the following sections. Respondents were asked to rate on a 1 to 5 scale their level of agreement where 1 is "Strongly Disagree" and 5 is "Strongly Agree". Results for the most recent study period and the previous four years are reported. Questions are as they appeared on the survey instrument.

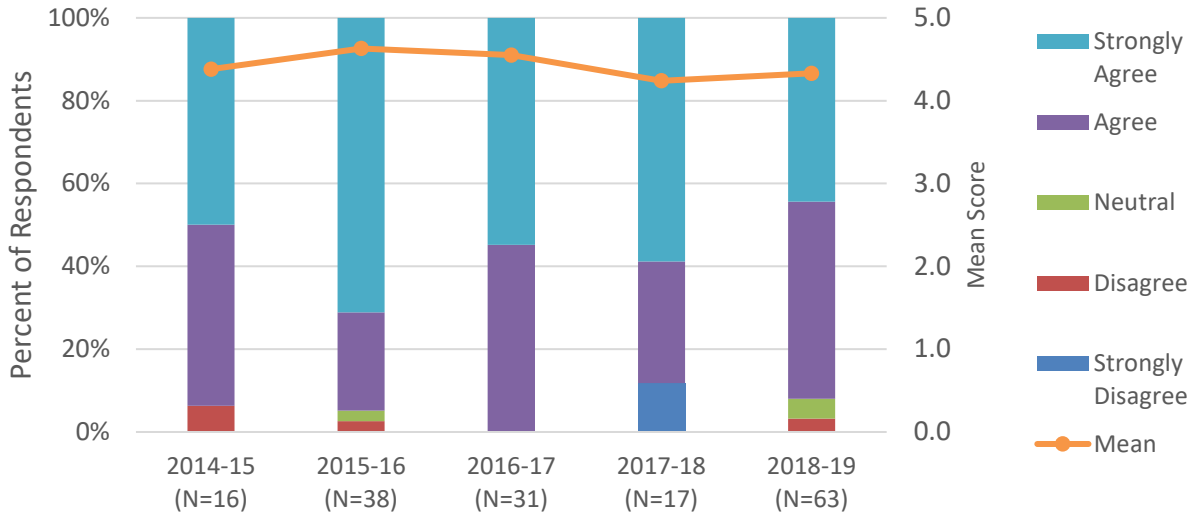
1. **We were well informed by the dental provider about the dental sealant program offered at our school (Q1.A).**

In 2018-19, the majority of respondents (92.0%) indicated that they agreed or strongly agreed that they were well informed about the dental sealant program. Previous years' responses were similar, with nearly unanimous agreement that respondents were well informed about the dental sealant program. The average scores were relatively consistent ranging from 4.24 in 2017-18 to 4.63 in 2015-16. Responses indicate a high level of agreement that respondents were well-informed about the dental sealant program (Table 8, Figure 11).

Table 8. Respondent's Level of Agreement, "We were well informed by the dental provider about the dental sealant program offered at our school.", Participating School Survey, by School Year

	2014-15 (N=16)		2015-16 (N=38)		2016-17 (N=31)		2017-18 (N=17)		2018-19 (N=63)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	0.0	0	0.0	0	11.8	2	0.0	0
Disagree	6.3	1	2.6	1	0.0	0	0.0	0	3.2	2
Neutral	0.0	0	2.6	1	0.0	0	0.0	0	4.8	3
Agree	43.8	7	23.7	9	45.2	14	29.4	5	47.6	30
Strongly Agree	50.0	8	71.1	27	54.8	17	58.8	10	44.4	28
Mean (Std. Dev.)	4.38 (0.81)		4.63 (0.67)		4.55 (0.51)		4.24 (1.30)		4.33 (0.72)	

Figure 11.
Respondent's Level of Agreement, "We were well informed by the dental provider about the dental sealant program offered at our school.", Participating School Survey, by School Year



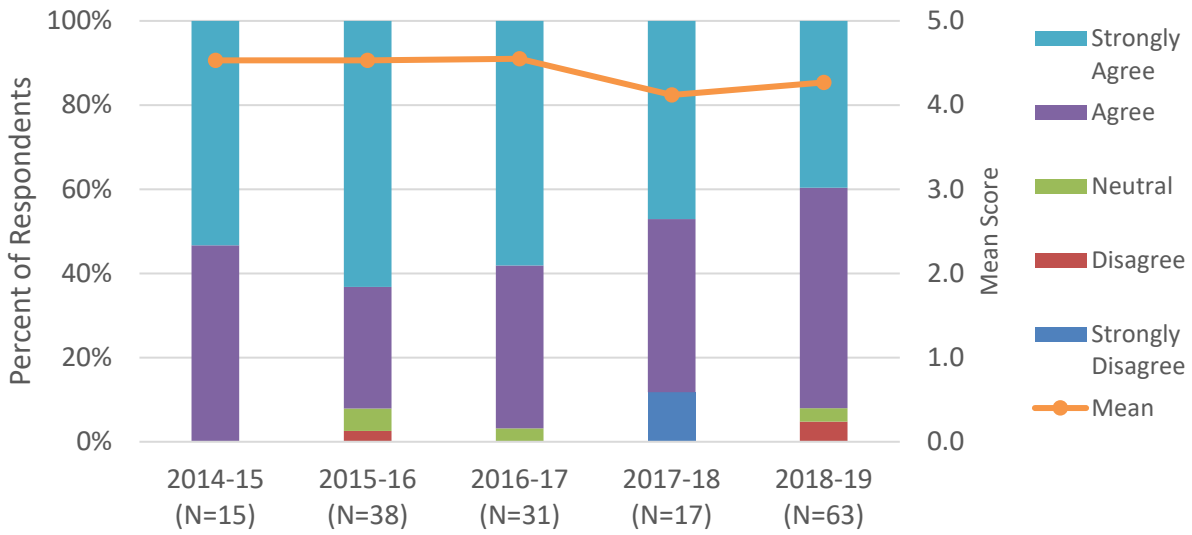
2. We had sufficient information to promote the dental sealant program (Q1.B).

The majority of respondents (92.1%) agreed or strongly agreed they had sufficient information to promote the dental sealant program in 2018-19. Three respondents (4.8%) disagreed that they had sufficient information to promote the dental sealant program (2018-19). Two respondents (11.8%) strongly disagreed that they had sufficient information to promote the dental program in the previous year (2017-18). In 2016-17, all but one respondent agreed or strongly agreed they had sufficient information to promote the dental sealant program. In 2015-16, 92.1 percent of respondents agreed or strongly agreed with the statement, while one respondent disagreed and two were neutral (5.3%). In 2014-15, all respondents agreed or strongly agreed they had sufficient information to promote the dental sealant program. Average scores were around 4.53 for the first three program years, indicating high levels of agreement among survey respondents that they had sufficient information to promote the school-based sealant program. The average score dropped slightly to 4.12 in 2017-18, but rose again to 4.27 in 2018-19. A score of 4.00 or higher indicates high levels of agreement among survey respondents (Table 9, Figure 12).

Table 9. Respondent's Level of Agreement, "We had sufficient information to promote the dental sealant program.", Participating School Survey, by School Year

	2014-15 (*N*=15)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=63)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	0.0	0	0.0	0	11.8	2	0.0	0
Disagree	0.0	0	2.6	1	0.0	0	0.0	0	4.8	3
Neutral	0.0	0	5.3	2	3.2	1	0.0	0	3.2	2
Agree	46.7	7	28.9	11	38.7	12	41.2	7	52.4	33
Strongly Agree	53.3	8	63.2	24	58.1	18	47.1	8	39.7	25
Mean (Std. Dev.)	4.53 (0.52)		4.53 (0.73)		4.55 (0.57)		4.12 (1.27)		4.27 (0.75)	

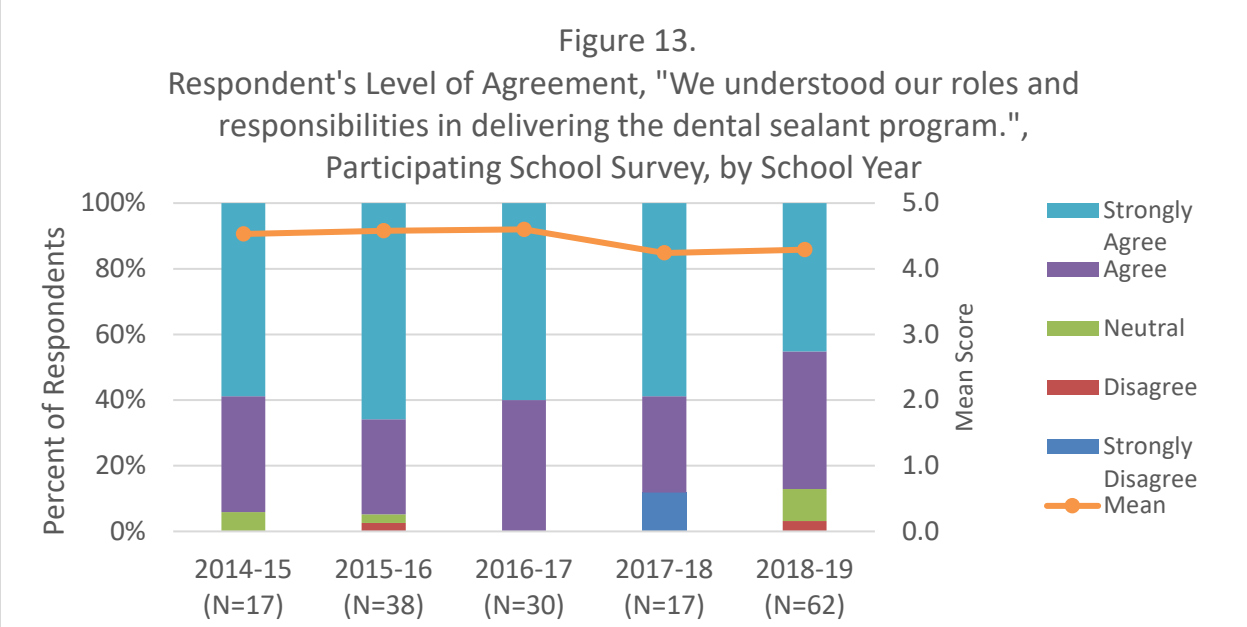
Figure 12.
Respondent's Level of Agreement, "We had sufficient information to promote the dental sealant program.", Participating School Survey, by School Year



3. **We understood our roles and responsibilities in delivering the dental sealant program (Q1.C).**

Over the course of the five-year study period, on average, 92 percent of respondents either agreed or strongly agreed that they understood their roles and responsibilities in delivering the dental sealant program. In 2018-19, 87.1 percent of respondents either agreed or strongly agreed that they understood their roles and responsibilities; two respondents (3.2%) disagreed and 6 (9.7%) were neutral. However, like the previous two questions, in 2017-18, two respondents, or 11.8 percent, strongly disagreed that they understood their roles and responsibilities delivering the dental sealant program. For 2016-17, all respondents agreed or strongly agreed that they understood their roles and responsibilities. In 2015-16, one respondent disagreed and one was neutral. Average scores ranged from 4.24 in 2017-18 to 4.60 in 2016-17 indicating a high level of agreement among respondents that they understood their roles and responsibilities in the delivery of the dental sealant program (Table 10, Figure 13).

Table 10. Respondent's Level of Agreement, "We understood our roles and responsibilities in delivering the dental sealant program.", Participating School Survey, by School Year										
	2014-15 (N=17)		2015-16 (*N*=38)		2016-17 (*N*=30)		2017-18 (*N*=17)		2018-19 (*N*=62)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	0.0	0	0.0	0	11.8	2	0.0	0
Disagree	0.0	0	2.6	1	0.0	0	0.0	0	3.2	2
Neutral	5.9	1	2.6	1	0.0	0	0.0	0	9.7	6
Agree	35.3	6	28.9	11	40.0	12	29.4	5	41.9	26
Strongly Agree	58.8	10	65.8	25	60.0	18	58.8	10	45.2	28
Mean (Std. Dev.)	4.53 (0.62)		4.58 (0.68)		4.60 (0.50)		4.24 (1.30)		4.29 (0.78)	



4. **Performing our school's roles and responsibilities in the dental sealant program took a great deal of staff time and effort (Q1.D).**

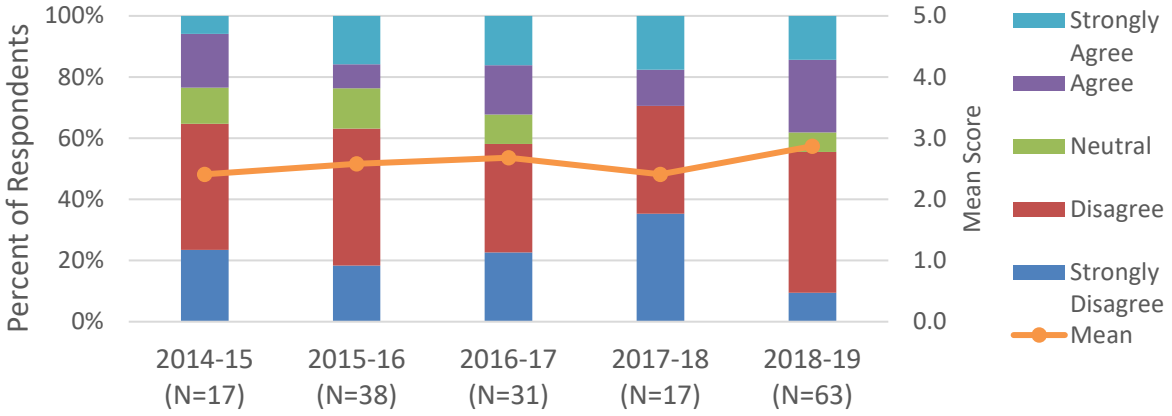
The majority of respondents indicated the school's roles and responsibilities did not take a great deal of staff time and effort. Approximately 56 percent of respondents in 2018-19 either disagreed or strongly disagreed that the dental sealant program took a great deal of staff time and effort, while about 38 percent of respondents either agreed or strongly agreed. Compared to other school years, the percentage of respondents who disagreed or strongly disagreed was smaller in 2018-19 than in previous years. In 2014-15, 65 percent of respondents either disagreed or strongly disagreed with the statement. This percentage decreased to 63 percent in 2015-16, 58 percent in 2016-17, and grew to 71 percent in 2017-18. This would suggest that as additional schools enter the program, the amount of time and effort required to perform the

school's roles and responsibilites in the dental sealant program increases temporarily (Table 11, Figure 14).

Table 11. Respondent's Level of Agreement, "Performing our school's roles and responsibilities in the dental sealant program took a great deal of staff time and effort.", Participating School Survey, by School Year

	2014-15 (*N*=17)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=63)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	23.5	4	18.4	7	22.6	7	35.3	6	9.5	6
Disagree	41.2	7	44.7	17	35.5	11	35.3	6	46.0	29
Neutral	11.8	2	13.2	5	9.7	3	0.0	0	6.3	4
Agree	17.6	3	7.9	3	16.1	5	11.8	2	23.8	15
Strongly Agree	5.9	1	15.8	6	16.1	5	17.6	3	14.3	9
Mean (Std. Dev.)	2.41 (1.23)		2.58 (1.33)		2.68 (1.42)		2.41 (1.54)		2.87 (1.29)	

Figure 14.
Respondent's Level of Agreement, "Performing our school's roles and responsibilities in the dental sealant program took a great deal of staff time and effort.", Participating School Survey, by School Year



5. We had sufficient communication with the dental provider to coordinate the delivery of services (Q1.E).

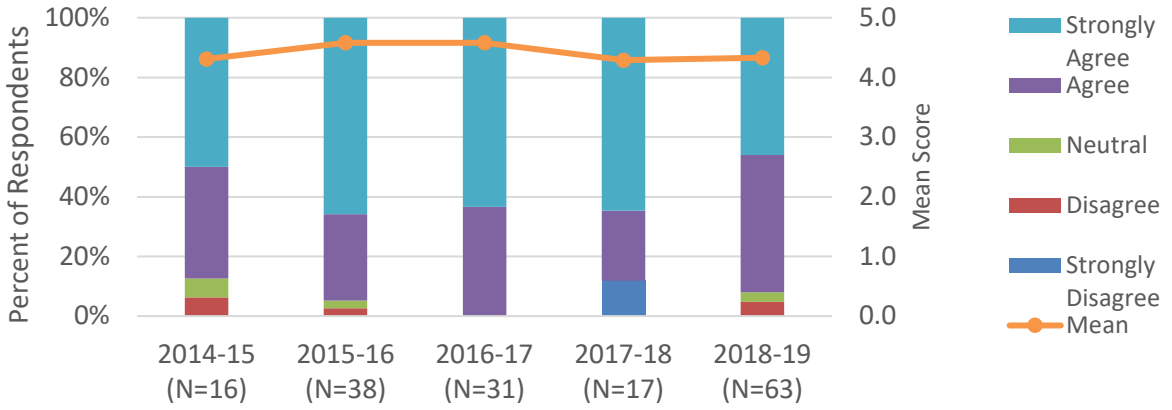
In 2018-19, 92 percent of respondents indicated they agreed or strongly agreed there was sufficient communication with the dental provider to coordinate the delivery of services, while only five percent disagreed with the statement. Approximately 88 percent of respondents agreed or strongly agreed that there was sufficient communication in the previous year (2017-18). In 2016-17, nearly 100 percent of respondents indicated there was sufficient communication. One respondent was neutral. Results were similar in 2015-16 and 2014-15, where one respondent disagreed or was neutral that there was sufficient communication with

the dental provider. Average scores ranged from 4.29 in 2017-18 to 4.58 in 2016-17, suggesting that respondents largely agreed that they had sufficient communication with the dental provider to coordinate the delivery of services (Table 12, Figure 15).

Table 12. Respondent's Level of Agreement, "We had sufficient communication with the dental provider to coordinate the delivery of services.", Participating School Survey, by School Year

	2014-15 (*N*=16)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=63)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	0.0	0	0.0	0	11.8	2	0.0	0
Disagree	6.3	1	2.6	1	0.0	0	0.0	0	4.8	3
Neutral	6.3	1	2.6	1	3.2	1	0.0	0	3.2	2
Agree	37.5	6	28.9	11	35.5	11	23.5	4	46.0	29
Strongly Agree	50.0	8	65.8	25	61.3	19	64.7	11	46.0	29
Mean (Std. Dev.)	4.31 (0.87)		4.58 (0.68)		4.58 (0.56)		4.29 (1.31)		4.33 (0.76)	

Figure 15.
Respondent's Level of Agreement, "We had sufficient communication with the dental provider to coordinate the delivery of services.", Participating School Survey, by School Year



6. We had sufficient communication with the dental provider regarding the operation of the dental sealant program (Q1.F).

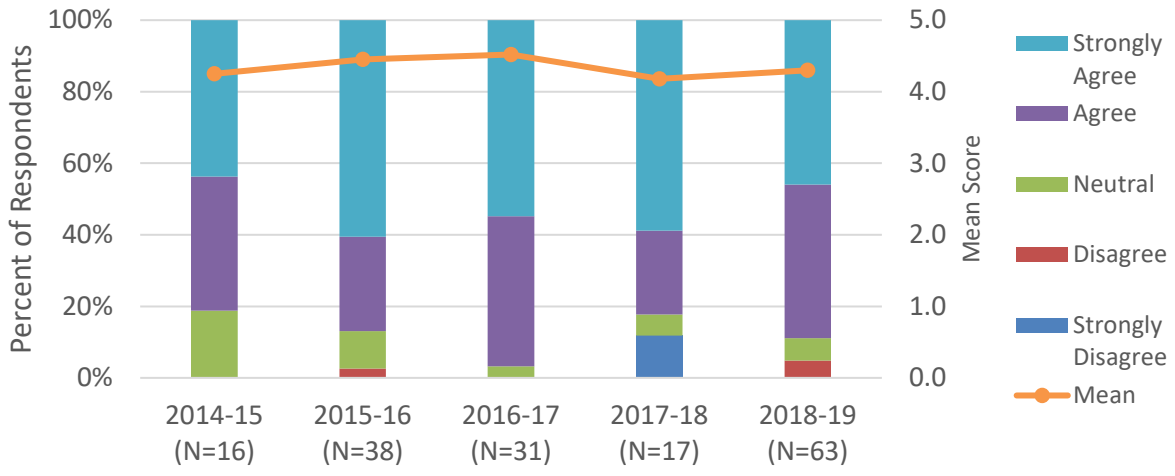
In 2018-19, nearly 90 percent of respondents either agreed or strongly agreed that there was sufficient communication with the dental provider regarding the operation of the dental sealant program. Four respondents were neutral (6.3%) and three respondents disagreed (4.8%). Approximately 82 percent of respondents in 2017-18 agreed or strongly agreed that there was sufficient communication, while two respondents (11.8%) strongly disagreed. In

2016-17, a large majority of respondents either agreed (41.9%) or strongly agreed (54.8%) that there was sufficient communication regarding the operation of the dental sealant program. One respondent was neutral. Only one respondent in 2015-16 disagreed with the statement that they had sufficient communication with the dental provider regarding the dental sealant program. Average scores ranged from 4.18 in 2017-18 to 4.52 in 2016-17 which indicates most respondents agreed they had sufficient communication with the dental provider (Table 13, Figure 16).

Table 13. Respondent's Level of Agreement, "We had sufficient communication with the dental provider regarding the operation of the dental sealant program.", Participating School Survey, by School Year

	2014-15 (*N*=16)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=63)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	0.0	0	0.0	0	11.8	2	0.0	0
Disagree	0.0	0	2.6	1	0.0	0	0.0	0	4.8	3
Neutral	18.8	3	10.5	4	3.2	1	5.9	1	6.3	4
Agree	37.5	6	26.3	10	41.9	13	23.5	4	42.9	27
Strongly Agree	43.8	7	60.5	23	54.8	17	58.8	10	46.0	29
Mean (Std. Dev.)	4.25 (0.77)		4.45 (0.80)		4.52 (0.57)		4.18 (1.33)		4.30 (0.80)	

Figure 16.
Respondent's Level of Agreement, "We had sufficient communication with the dental provider regarding the operation of the dental sealant program.", Participating School Survey, By School Year



Perceptions of Service Provided by the Dental Provider

Respondents were asked about their level of agreement on several statements related to the service provided by the dental provider. Respondents were asked to rate on a 1 to 5 scale their level of agreement where 1 is "Strongly Disagree" and 5 is "Strongly Agree". Results for the most recent study period and the previous four years are reported. Questions are as they appeared on the survey instrument.

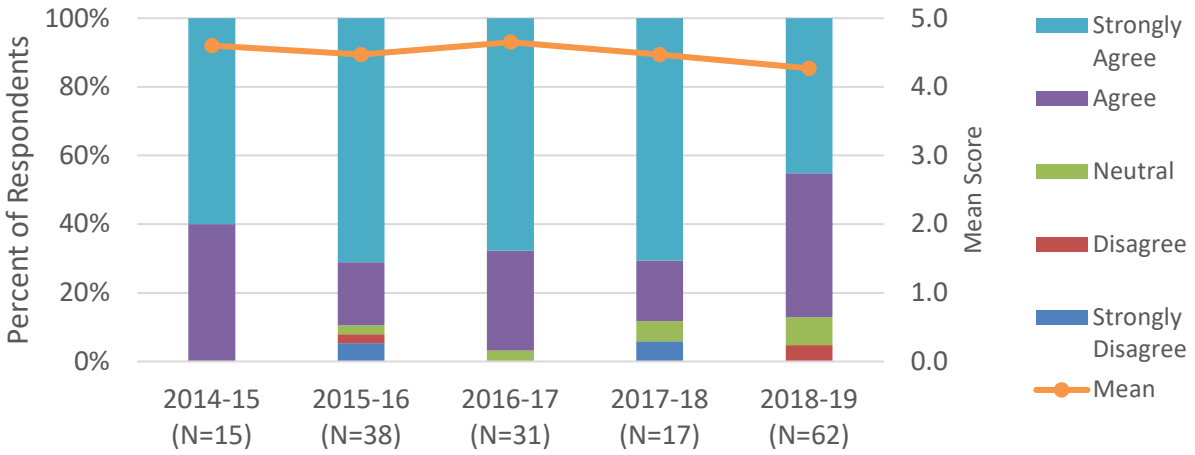
1. It was easy to get in touch with the dental provider (Q2.A).

Nearly all respondents either agreed or strongly agreed with the statement that the dental provider who provided services was easy to contact. Eighty-seven to 100 percent of respondents either agreed or strongly agreed with the statement over the past five years. Approximately 8 percent of respondents were neutral and 5 percent disagreed with the statement, while the majority (87.1%) agreed or strongly agreed that the dental provider was easy to contact, in 2018-19. In 2017-18, 88.2 percent either agreed or strongly agreed with the statement, one respondent (5.9%) strongly disagreed, and one respondent was neutral. Average scores were high, ranging from 4.27 in 2018-19 to 4.65 in 2016-17, indicating overall satisfaction with school personnel's ability to contact the dental provider who provided services at the respondent's school (Table 14, Figure 17).

Table 14. Respondent's Level of Agreement, "It was easy to get in touch with the dental provider.", Participating School Survey, by School Year

	2014-15 (*N*=15)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=62)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	5.3	2	0.0	0	5.9	1	0.0	0
Disagree	0.0	0	2.6	1	0.0	0	0.0	0	4.8	3
Neutral	0.0	0	2.6	1	3.2	1	5.9	1	8.1	5
Agree	40.0	6	18.4	7	29.0	9	17.6	3	41.9	26
Strongly Agree	60.0	9	71.1	27	67.7	21	70.6	12	45.2	28
Mean (Std. Dev.)	4.60 (0.51)		4.47 (1.06)		4.65 (0.55)		4.47 (1.07)		4.27 (0.81)	

Figure 17.
Respondent's Level of Agreement, "It was easy to get in touch with the dental provider.", Participating School Survey, by School Year



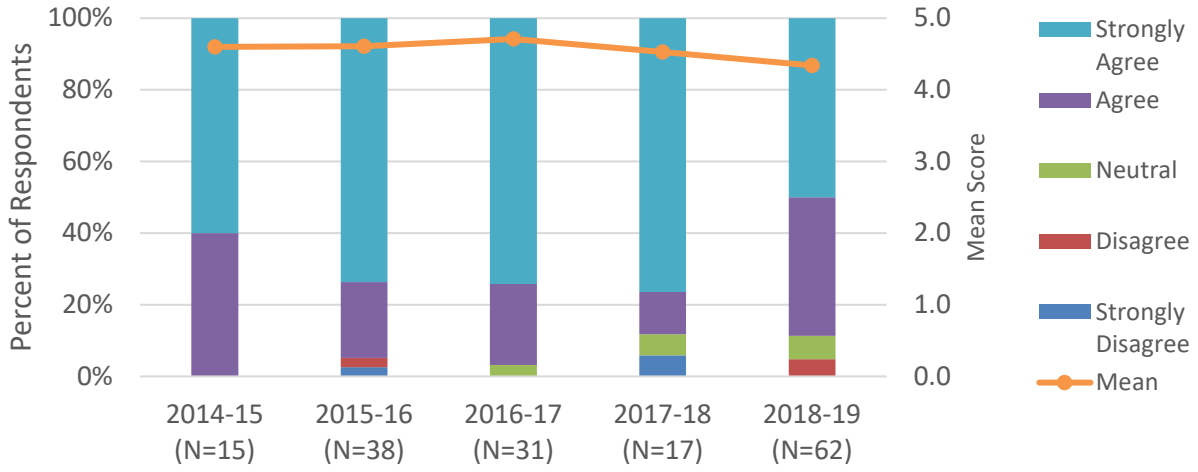
2. It was easy to communicate with the dental provider (Q2.B).

Nearly all respondents either agreed or strongly agreed with the statement that the dental provider that provided services was easy to communicate with. Eighty-eight to 100 percent of respondents either agreed or strongly agreed with the statement in each of the five one-year study periods. Seven respondents in 2018-19 (11.3%) were neutral or disagreed with the statement; the majority of respondents, 89 percent, either agreed or strongly agreed that the dental provider was easy to communicate with. In 2017-18, 5.9 percent of respondents strongly disagreed with the statement. Even with the few respondents who disagreed with the statement, average scores were high, ranging from 4.34 in 2018-19 to 4.71 in 2016-17, indicating overall satisfaction with respondent's ability to communicate with the dental provider who provided service at the respondent's school (Table 15, Figure 18).

Table 15. Respondent's Level of Agreement, "It was easy to communicate with the dental provider.", Participating School Survey, by School Year

	2014-15 (*N*=15)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=62)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	2.6	1	0.0	0	5.9	1	0.0	0
Disagree	0.0	0	2.6	1	0.0	0	0.0	0	4.8	3
Neutral	0.0	0	0.0	0	3.2	1	5.9	1	6.5	4
Agree	40.0	6	21.1	8	22.6	7	11.8	2	38.7	24
Strongly Agree	60.0	9	73.7	28	74.2	23	76.5	13	50.0	31
Mean (Std. Dev.)	4.60 (0.51)		4.61 (0.86)		4.71 (0.53)		4.53 (1.07)		4.34 (0.81)	

Figure 18.
Respondent's Level of Agreement, "It was easy to communicate with the dental provider.", Participating School Survey, by School Year



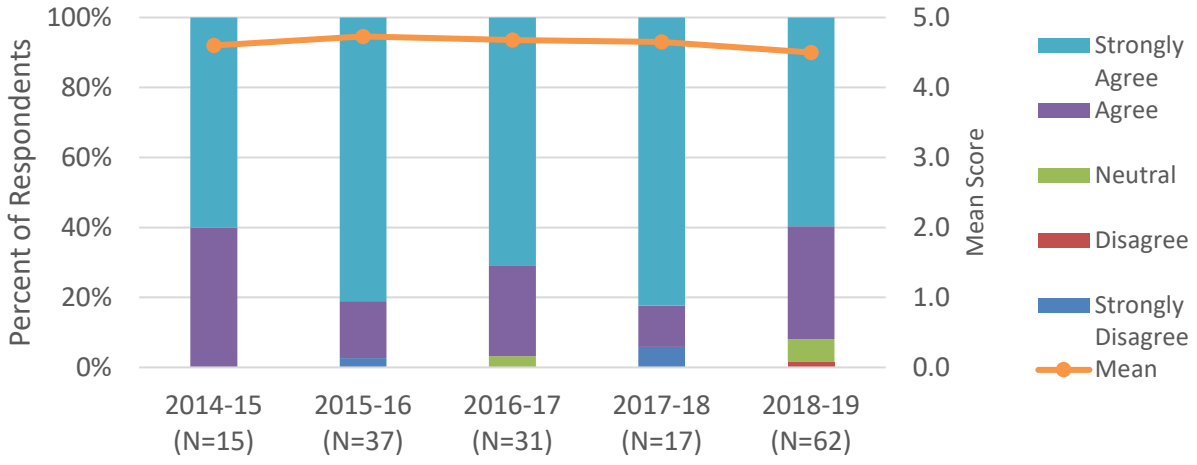
3. The dental provider was knowledgeable about oral health care (Q2.C).

Nearly all respondents either agreed or strongly agreed with the statement that the dental provider who provided services was knowledgeable about oral health matters in 2018-19 (92.0%). Ninety-two to 100 percent of respondents either agreed or strongly agreed with the statement over the five-year period. In 2017-18 and in 2015-16 one respondent strongly disagreed with the statement. Average scores of 4.50 and higher in each of the program years indicate widespread agreement with the statement suggesting overall agreement that the dental provider who provided services in the respondent's school was knowledgable about oral health matters (Table 16, Figure 19).

Table 16. Respondent's Level of Agreement, "The dental provider was knowledgeable about oral health care.", Participating School Survey, by School Year

	2014-15 (*N*=15)		2015-16 (*N*=37)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=62)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	2.7	1	0.0	0	5.9	1	0.0	0
Disagree	0.0	0	0.0	0	0.0	0	0.0	0	1.6	1
Neutral	0.0	0	0.0	0	3.2	1	0.0	0	6.5	4
Agree	40.0	6	16.2	6	25.8	8	11.8	2	32.3	20
Strongly Agree	60.0	9	81.1	30	71.0	22	82.4	14	59.7	37
Mean (Std. Dev.)	4.60 (0.51)		4.73 (0.73)		4.68 (0.54)		4.65 (1.00)		4.50 (0.70)	

Figure 19.
Respondent's Level of Agreement, "The dental provider was knowledgeable about oral health care.", Participating School Survey, by School Year

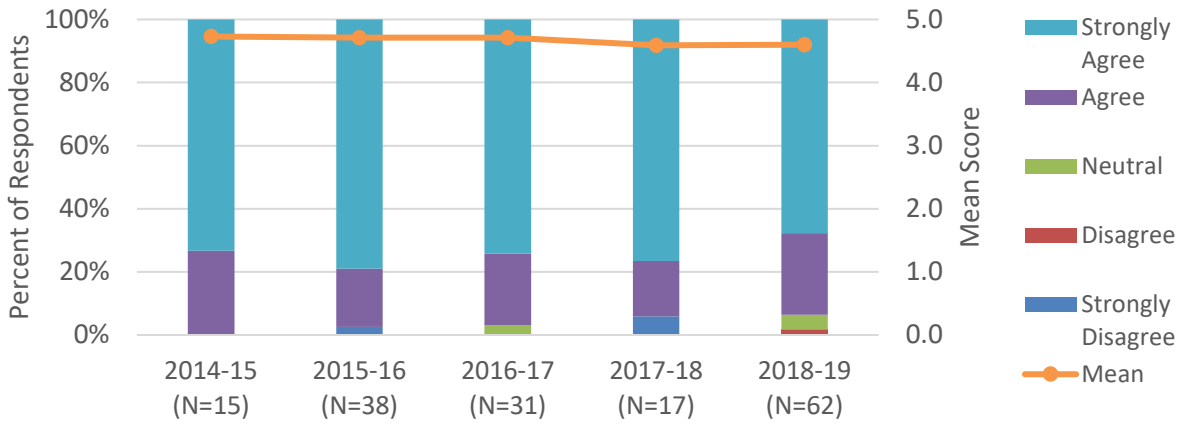


4. The dental provider was considerate to staff and students (Q2.D).

Consistent with responses to other questions regarding satisfaction with the dental provider that provided services in the respondent's school, dental providers were rated favorably with regard to being considerate to staff and students. Ninety-four to 100 percent of respondents either agreed or strongly agreed with the statement that the dental provider who provided services at the respondent's school was considerate to staff and students. In 2018-19, one respondent (1.6%) disagreed with the statement and three respondents were neutral (4.8%). In 2017-18 and 2015-16 , one respondent strongly disagreed with the statement and in 2016-17 one respondent was neutral. Average scores of 4.59 and higher in each of the study years indicate widespread agreement among respondents that the dental provider who provided services in the respondent's school was considerate to staff and students (Table 17, Figure 20).

Table 17. Respondent's Level of Agreement, "The dental provider was considerate to staff and students.", Participating School Survey, by School Year										
	2014-15 (*N*=15)		2015-16 (*N*=38)		2016-17 (*N*=31)		2017-18 (*N*=17)		2018-19 (*N*=62)	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*
Strongly Disagree	0.0	0	2.6	1	0.0	0.0	5.9	1	0.0	0
Disagree	0.0	0	0.0	0	0.0	0.0	0.0	0	1.6	1
Neutral	0.0	0	0.0	0	3.2	1	0.0	0	4.8	3
Agree	26.7	4	18.4	7	22.6	7	17.6	3	25.8	16
Strongly Agree	73.3	11	78.9	30	74.2	23	76.5	13	67.7	42
Mean (Std. Dev.)	4.73 (0.46)		4.71 (0.73)		4.71 (0.53)		4.59 (1.00)		4.60 (0.66)	

Figure 20.
Respondent's Level of Agreement, "The dental provider was considerate to staff and students.", Participating School Survey, by School Year



Media/Communication Efforts

Respondents were asked about their school's use of media in communication efforts and the effectiveness of such efforts. The following questions were new to the 2018-19 Participating School Survey. Questions are as they appeared on the survey instrument.

1. What types of media/communication do you use to inform parents about school announcements and various programs and activities at your school? (Q3).

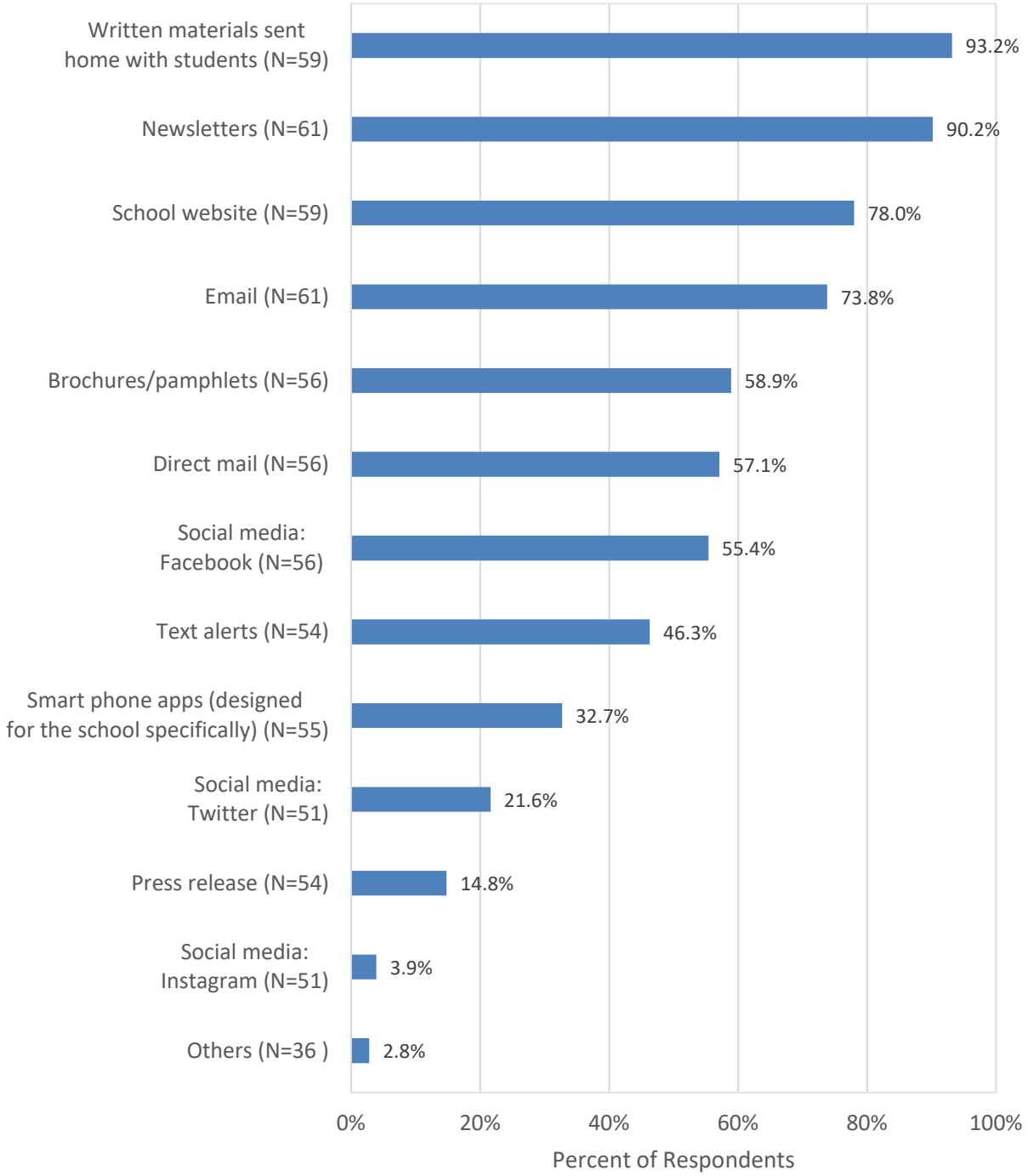
Respondents were asked to indicate what types of media and communication tools they used to inform parents about school announcements and various programs and activities. Written materials sent home with students and newsletters were the most commonly used

communication tools (93.2% and 90.2% of respondents, respectively). Use of the school website, email, brochures/pamphlets, and direct mail were also popular means of communication (78.0%, 73.8%, 58.9%, and 57.1%, respectively). Facebook was the most frequently used social media platform. About half of respondents indicated their school used Facebook (55.4%), while 22 percent of respondents indicated their school used Twitter and 4 percent used Instagram. The use of text messaging and smart phone applications was not cited as frequently, though nearly half (46.3%) of respondents indicated their school used text alerts and a third indicated the use of smart phone apps (32.7%) (Table 18, Figure 21).

Table 18. Respondent's Reported Media/Communication Type (s), "What type(s) of media/communication do you use to inform parents about school announcements and various programs and activities at your school?", Participating School Survey, 2018-19

Media/communication	Yes		No	
	%	*n*	%	*n*
Written materials sent home with students (*N*=59)	93.2	55	6.8	4
Newsletters (*N*=61)	90.2	55	9.8	6
School website (*N*=59)	78.0	46	22.0	13
Email (*N*=61)	73.8	45	26.2	16
Brochures/pamphlets (*N*=56)	58.9	33	41.1	23
Direct mail (*N*=56)	57.1	32	42.9	24
Social media: Facebook (*N*=56)	55.4	31	44.6	25
Text alerts (*N*=54)	46.3	25	53.7	29
Smart phone apps (designed for the school specifically) (*N*=55)	32.7	18	67.3	37
Social media: Twitter (*N*=51)	21.6	11	78.4	40
Press release (*N*=54)	14.8	8	85.2	46
Social media: Instagram (*N*=51)	3.9	2	96.1	49
Others* (*N*=36)	2.8	1	97.2	35
*Other responses were unspecified.				

Figure 21.
Respondent's Reported Media/Communication Type(s), "What type(s) of media/communication do you use to inform parents about school announcements and various programs and activities at your school?", Participating School Survey, 2018-19



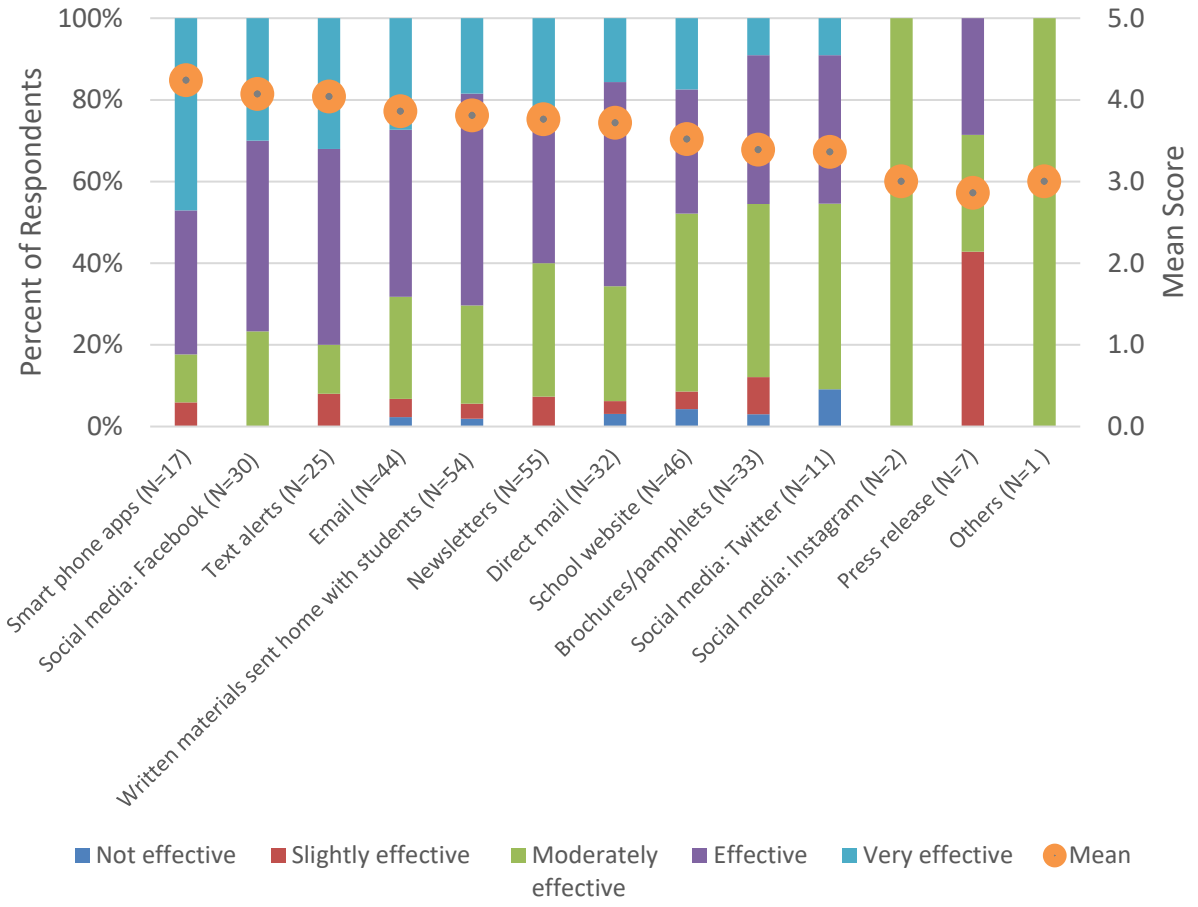
2. Please indicate the level of effectiveness on the type (s) of media that you answered "Yes" to on Q3 (Q3.1).

Respondents who indicated their school used various communication methods were then asked to gauge the effectiveness of each type of communication method. Respondents were asked to rate on a 1 to 5 scale the level of effectiveness where 1 is “Not effective” and 5 is “Very effective”. The most frequently used communication tools were generally rated as less effective than some of the less frequently used communication methods. While newsletters and written materials sent home with students were used most frequently, they were not considered the most effective (means=3.76 and 3.81, respectively). Rather, smart phone applications, Facebook, and text alerts, which were used less frequently, were considered the most effective means of communication (means=4.24, 4.07, and 4.04, respectively). Press releases (mean=2.86) and Instagram (mean=3.00) were deemed the least effective means of communicating with parents (Table 19, Figure 22).

Table 19. Media/Communication Type, by Level of Effectiveness, Participating School Survey, 2018-19

Media/ communication	Not effective		Slightly effective		Moderately effective		Effective		Very effective		Mean
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	
Smart phone apps (designed for the school specifically) (*N*=17)	0.0	0	5.9	1	11.8	2	35.3	6	47.1	8	4.24
Social media: Facebook (*N*=30)	0.0	0	0.0	0	23.3	7	46.7	14	30.0	9	4.07
Text alerts (*N*=25)	0.0	0	8.0	2	12.0	3	48.0	12	32.0	8	4.04
Email (*N*=44)	2.3	1	4.5	2	25.0	11	40.9	18	27.3	12	3.86
Written materials sent home with students (*N*=54)	1.9	1	3.7	2	24.1	13	51.9	28	18.5	10	3.81
Newsletters (*N*=55)	0.0	0	7.3	4	32.7	18	36.4	20	23.6	13	3.76
Direct mail (*N*=32)	3.1	1	3.1	1	28.1	9	50.0	16	15.6	5	3.72
School website (*N*=46)	4.3	2	4.3	2	43.5	20	30.4	14	17.4	8	3.52
Brochures/pamphlets (*N*=33)	3.0	1	9.1	3	42.4	14	36.4	12	9.1	3	3.39
Social media: Twitter (*N*=11)	9.1	1	0.0	0	45.5	5	36.4	4	9.1	1	3.36
Social media: Instagram (*N*=2)	0.0	0	0.0	0	100.0	2	0.0	0	0.0	0	3.00
Press release (*N*=7)	0.0	0	42.9	3	28.6	2	28.6	2	0.0	0	2.86
Others* (*N*=1)	0.0	0	0.0	0	100.0	1	0.0	0	0.0	0	3.00
*”Other” response was unspecified.											

Figure 22.
Media/Communication Type, by Level of Effectiveness, Participating School Survey, 2018-19



Program Support

Respondents were asked about approaches dental providers might take to further support the sealant program in their schools. The following questions were new to the 2018-19 Participating School Survey. Questions are as they appeared on the survey instrument.

1. **What can the dental provider do to further support the program in your school? Please indicate your level of agreement with the following approaches (Q4).**

Respondents were asked to rate how helpful various tools and activities would be to support the school-based sealant program. Respondents were asked to rate on a 1 to 5 scale the level of helpfulness where 1 is “Not at all helpful” and 5 is “Very helpful”. Respondents indicated that the most helpful tools would be materials that explain the program in easy-to-understand language (mean=4.07) and handouts of frequently asked questions (mean=4.05). Providing a list of providers that work with low-income families and accept Medicaid and developing

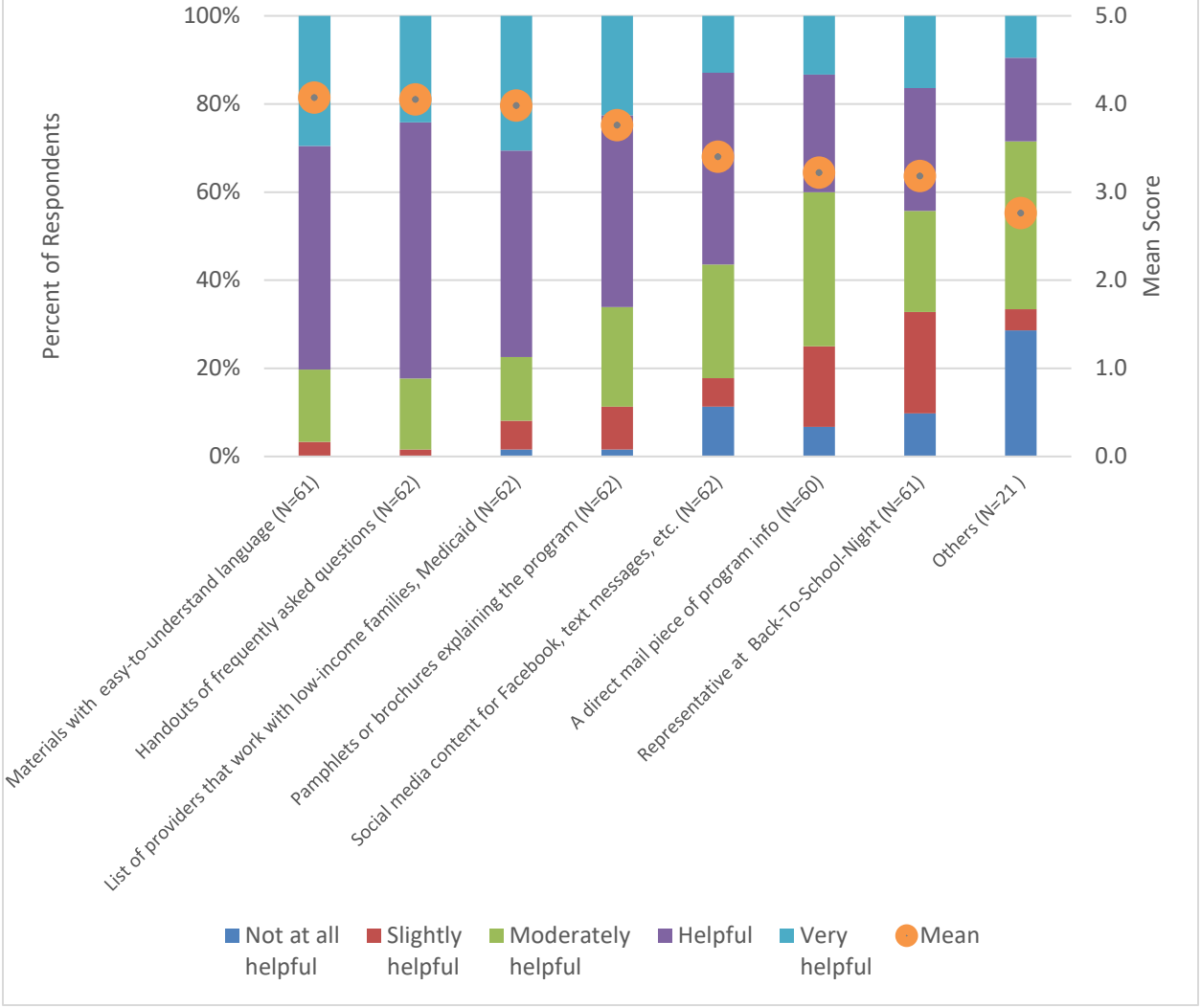
pamphlets or brochures explaining the program were viewed as relatively helpful approaches (mean=3.98 and 3.76, respectively). Having a representative at Back-to-School night (mean=3.18) and a direct piece of mail about the program (mean=3.22) were perceived to be somewhat less helpful approaches (Table 20, Figure 23).

Table 20. Dental Provider Approaches to Further Support the Program in the School, by Level of Helpfulness, Participant School Survey, 2018-19

Approach	Not at all helpful		Slightly helpful		Moderately helpful		Helpful		Very helpful		Mean
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	
Develop materials that explain the program in easy-to-understand language (*N*=61)	0.0	0	3.3	2	16.4	10	50.8	31	29.5	18	4.07
Develop handouts of frequently asked questions (*N*=62)	0.0	0	1.6	1	16.1	10	58.1	36	24.2	15	4.05
Provide a list of providers that work with low-income families/accept Medicaid (*N*=62)	1.6	1	6.5	4	14.5	9	46.8	29	30.6	19	3.98
Develop pamphlets or brochures explaining the program (*N*=62)	1.6	1	9.7	6	22.6	14	43.5	27	22.6	14	3.76
Develop social media content for Facebook, text messages, etc. (*N*=62)	11.3	7	6.5	4	25.8	16	43.5	27	12.9	8	3.40
A direct mail piece of program info (*N*=60)	6.7	4	18.3	11	35.0	21	26.7	16	13.3	8	3.22
Have a representative participate in Back-To-School-Night (*N*=61)	9.8	6	23.0	14	23.0	14	27.9	17	16.4	10	3.18
Others* (*N*=21)	28.6	6	4.8	1	38.1	8	19.0	4	9.5	2	2.76

*Only one "Other" response was specified: "Our school has 45-50% enrollment of English Learners and multiple languages are spoken here. Parents may speak their own language but maybe not able to read in their language or English".

Figure 23.
Dental Provider Approaches to Further Support the Program in the School, by Level of Helpfulness, Participant School Survey, 2018-19



Constraints/Challenges Faced by School District and Strategies to Make Improvements

Respondents were asked to report their level of agreement with challenges to obtaining consent for participation in their school, as well with the burdensomeness of constraints placed by the program on their schools and school staff. The following questions were new to the 2018-19 Participating School Survey. Questions are as they appeared on the survey instrument.

1. **What are the challenges to obtaining the consent for participation in your school? Please indicate your level of agreement with the following statements (Q5).**

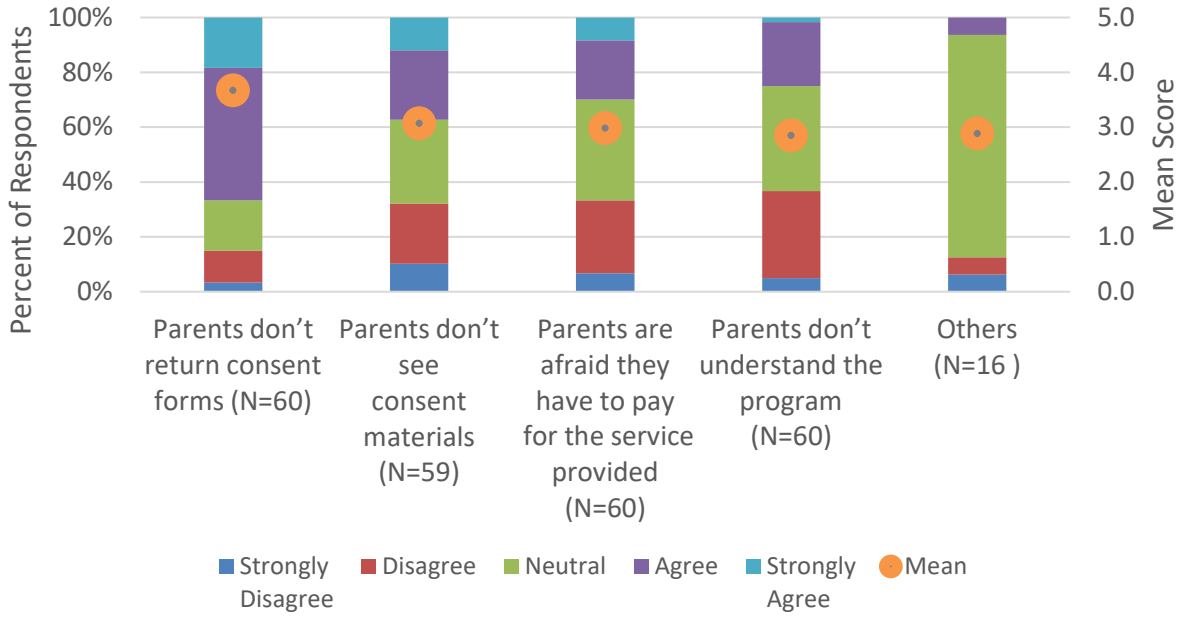
Respondents were asked to indicate their level of agreement with challenges to obtaining consent from parents for student participation in the program. Respondents were asked to rate on a 1 to 5 scale their level of agreement where 1 is "Strongly Disagree" and 5 is "Strongly Agree". Respondents most frequently agreed that simply getting parents to return the consent form was the most challenging. Two-thirds of respondents agree or strongly agreed that parents simply do not return the consent forms (66.6%). Alternately, it appears that lack of understanding of the program or fear of having to pay for services appears to be less of a challenge. Approximately one-third of respondents (36.7%) disagreed or strongly disagreed that obtaining consent forms was challenging due to lack of parental understanding of the program (Table 21, Figure 24).

Table 21. Respondent's Level of Agreement, "What are the Challenges to Obtaining Consent for Program Participation?", Participating School Survey, 2018-19

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		
Statement	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	Mean
Parents don't return consent forms (*N*=60)	3.3	2	11.7	7	18.3	11	48.3	29	18.3	11	3.67
Parents don't see consent materials (*N*=59)	10.2	6	22.0	13	30.5	18	25.4	15	11.9	7	3.07
Parents are afraid they have to pay for the service provided (*N*=60)	6.7	4	26.7	16	36.7	22	21.7	13	8.3	5	2.98
Others* (*N*=16)	6.3	1	6.3	1	81.3	13	6.3	1	0.0	0	2.88
Parents don't understand the program (*N*=60)	5.0	3	31.7	19	38.3	23	23.3	14	1.7	1	2.85

*"Other" responses specified include: "Create a parent opt-out approach. Only return the form if you do not want your child screened versus having [them] all return with parent approval" and "Our school enrollment is 45-50% English Learners and multiple languages are spoken here."

Figure 24.
Respondent's Level of Agreement, "What are the Challenges to Obtaining Consent for Program Participation", Participating School Survey, 2018-19

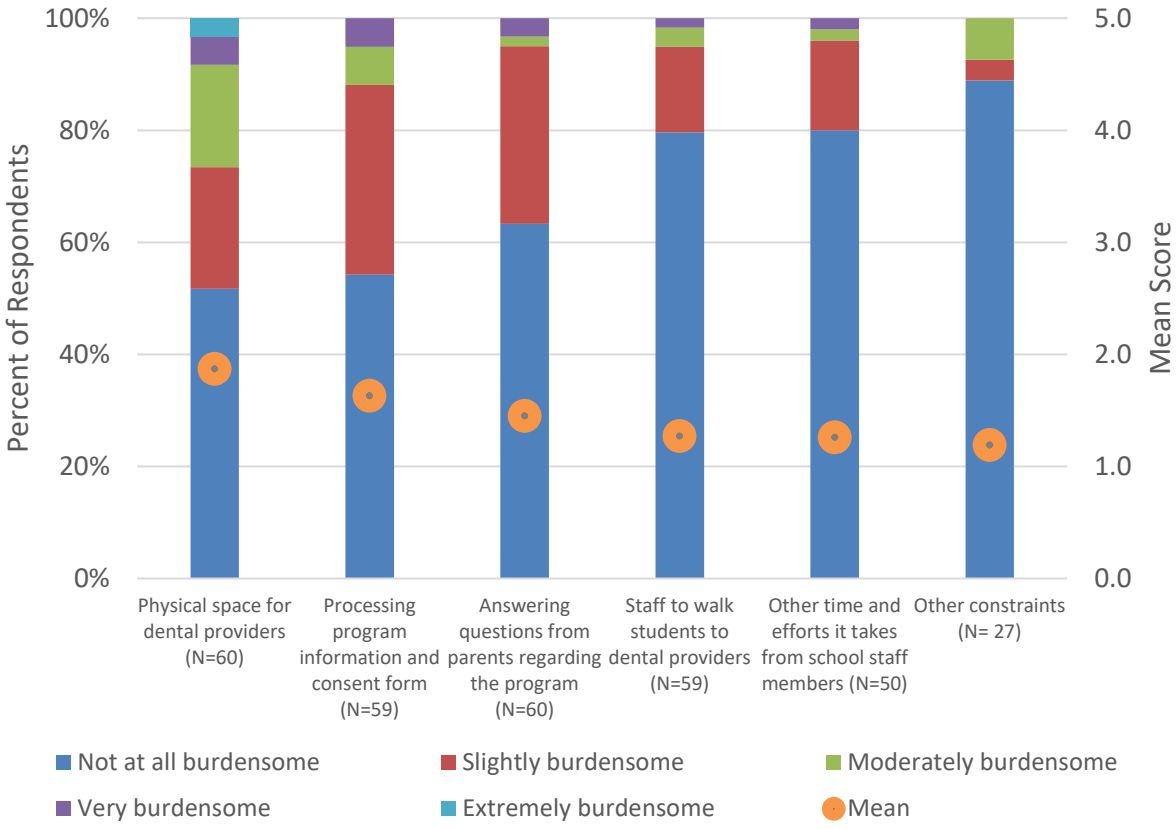


2. Please rate the following constraints to your school and your school staff (Q6).

Respondents were asked whether certain aspects of the program presented burdens to school staff. Respondents were asked to rate on a 1 to 5 scale their level of agreement where 1 is "Not at all burdensome" and 5 is "Extremely burdensome". Overall, respondents considered constraints to be either not at all or slightly burdensome. Average scores ranged from 1.19 to 1.87. Excluding both 'other' categories, respondents perceived that walking students to the dental service provider was the least burdensome constraint (mean=1.27), while the physical space needed for dental providers was considered the most burdensome to the school and school staff (mean=1.87) (Table 22, Figure 25).

Table 22. Constraints to School and School Staff, by Level of Burdensomeness, Participating School Survey, 2018-19											
	Not at all burdensome		Slightly burdensome		Moderately burdensome		Very burdensome		Extremely burdensome		
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	Mean
Physical space for dental providers (*N*=60)	51.7	31	21.7	13	18.3	11	5.0	3	3.3	2	1.87
Time and efforts to process program information and consent form (*N*=59)	54.2	32	33.9	20	6.8	4	5.1	3	0.0	0	1.63
Time and efforts to answer questions from parents regarding the program (*N*=60)	63.3	38	31.7	19	1.7	1	3.3	2	0.0	0	1.45
Staff to walk students to dental providers (*N*=59)	79.7	47	15.3	9	3.4	2	1.7	1	0.0	0	1.27
Other time and efforts it takes from school staff members* (*N*=50)	80.0	40	16.0	8	2.0	1	2.0	1	0.0	0	1.26
Other constraints** (*N*=27)	88.9	24	3.7	1	7.4	2	0.0	0	0.0	0	1.19
*"Other time and efforts" responses specified include: "A couple teachers commented on me interrupting class but we had let them know in advance they might get interrupted", " A little extra work for our administrative assistant, but not too much", "Having to make up the lesson and work for the student missing the class for that amount of time", "Time from instruction", and "We have your staff walk and return students"											
**Other constraints not specified.											

Figure 25.
Constraints to School and School Staff, by Level of Burdensomeness, Participating School Survey, 2018-19



Comments and Suggestions

The final section of the survey asked respondents for their comments and suggestions regarding program improvement. The responses to the open-ended questions were summarized as follows. Verbatim responses are detailed following the summary. Responses to opened ended questions for previous years' studies are detailed in Appendix B.

1. **Will you please provide any additional feedback/suggestions on how we can improve the dental sealant program? Your input would be critical (Q7).**

Nearly 40 percent of respondents offered suggestions for improvement of the school-based dental sealant program. A few respondents had no comments or issues, and several praised the program by stating how well the program has worked at their school and expressed appreciation for the services offered. Respondents also shared positive comments about the dental providers, suggesting they were knowledgeable, helpful, friendly, and collaborative. Respondents also commented on how important the program is for students who would not otherwise see the dentist and a desire for greater parental participation. Respondents

expressed interest in continued contact; one respondent requested continued reminders to the administrative assistant, and one respondent stated they had not received any information for the school year. Finally, comments suggest hope for greater collaboration with other organizations such as the Indian Health Service. Verbatim responses are offered below.

- Continue emailing about what is coming and sending reminders to the Administrative Assistant
- From what I saw and heard, I think it went well.
- Good program and the process goes very smoothly.
- I think everything went really well. The dental staff were very helpful, understanding and friendly
- It has been great!
- It has worked well at [school name]
- [Name] was wonderful. We hope our next hygienist will be similar to [pronoun]!
- [School name] didn't receive any information for the school year…tried to show we didn't have the program in our school with the answers. Thank you, [respondent name]
- no thanks
- None
- None at this time. We have not had any issues.
- Our parent and students that use the program are very appreciative.
- Thank you for coming out and serving our community!
- The program goes very smoothly. It is a great service for our families.
- The program itself is a wonderful program for our students. I don't see any improvements that would need to be done.
- The program was great! We appreciate all of your work and want to thank you. We hope to have you back soon.
- The staff have been very helpful and collaborative to work with.
- Things went well, worked well for students/family.
- This is a fabulous program/opportunity for families. Very pleasant, knowledgeable staff. The more info we can have to get out the word, the better!
- This is simply a wonderful program!
- This program is very beneficial for our students.
- This program is wonderful for our children at [school name]. Students that may never see a dentist get to have a hygienist look at their teeth. We are so lucky to have this opportunity to have a hygienist come to our school.
- We appreciate the program and wished for greater participation by parents. Our hygienist who comes here is so friendly with the students and staff and very easy to work with.
- We'd like to be able to have a direct link to Indian [Health] service so we can help children who do not get help at home. I say this so I can bring children directly to the dentist.

Key Findings and Recommendations

Conclusions and recommendations for analysis and calculation of averted cavities and the participating school survey are detailed in the following sections.

Calculation of Averted Cavities

Seal!ND is one example of an innovative and cost-effective approach used by the North Dakota Department of Health's Oral Health Program. In just five years, Seal!ND has helped to prevent 4,098 cavities in permanent molars in North Dakota students and referred 2,376 students to dental providers for treatment. Preventing cavities not only saves money by avoiding health care costs but helps students do better in school. Children with poor oral health are more than three times as likely to miss school due to dental pain (Jackson et al., 2011). Seal!ND not only improves oral health in children, but also improves educational outcomes by helping to keep children in class and focused on learning rather than on dental pain.

The program is effectively reaching its target audience. Underserved children frequently are from homes characterized by low incomes. To target low-income and underserved children, the program targets schools for participation based on the number of students enrolled in the free and reduced-price lunch program. In 2018-19, Seal!ND targeted schools with at least 45 percent of students enrolled in the free and reduced-price lunch program. Student screening data also suggest the program is reaching minorities, who are often underserved. The percentage of minorities participating in the program is greater than the percentage of minorities statewide. This was especially evident in the number of American Indian children participating in the program. American Indian children represented 9 percent of all children statewide in 2018, yet they represented 19 percent of program participants for 2018-19.

To more accurately capture how the program is reaching minority youth, specifically Hispanic/Latino youth, the screening sheet used by dental providers should be modified to remove the Hispanic/Latino option from the "Race" category. A separate category, "Ethnicity" already exists on the screening sheet to capture this component, as Hispanic origin is an ethnicity, not a race. This modification to the screening sheet would remove potential confusion in reporting and further clarify student participation.

Screenings and sealant applications are timed to coincide with eruption of first molars. Students were more frequently screened in Kindergarten and Pre-K, and sealants were more frequently applied when students were in first grade and second grade. Both findings are consistent with best practices as sealants are most effective when applied soon after first molars erupt at age six to seven when most children are in first grade. This would suggest that Seal!ND is effectively targeting younger children to seal first permanent molars.

Program evaluation could be improved if data were coded in a manner where actual retention rates are calculated rather than using CDC secondary sources for retention rates. While best practices call for sealant placement to be evaluated after one year, given the program is delivered during the school year, the one-year evaluation is challenging. Students would need to be tracked from year to year, increasing administrative burdens on dental providers. A potential alternative would be to calculate retention rates based on the six to eight-month

period that coincides with fall screenings and applications, and spring screenings, applications, and retention screenings. A leading expert in effectiveness has indicated that when checking for placement issues, retention checks can be done soon after application. “Checks for material are appropriate 6 to 12 months after application.” This would suggest that calculating North Dakota retention rates using data from spring and fall screenings may be appropriate (Fontana, 2018). This would allow for a more precise determination of cavities averted in North Dakota as a result of the school-based sealant program.

In addition to reporting findings associated with schools that meet the 45 percent free and reduced-price lunch participation threshold, findings should be reported for all participating schools. Limiting reporting to only those schools meeting the threshold underestimates overall impacts associated with school-based sealant programs. In order to gauge effectiveness in targeted schools (45% free and reduced-price lunch participation), findings could be reported separately for those targeted schools. Reporting all findings would provide a more accurate assessment of the number of cavities averted and cost savings as a result of the school-based sealant program.

Participating School Survey

School administrators indicated high levels of satisfaction with their experience with the school-based dental sealant program. Respondents nearly unanimously agreed that dental providers were well informed about the dental sealant program, that school personnel had sufficient information to promote the dental sealant program, and that they understood their roles and responsibilities in delivering the dental sealant program. Responses were slightly mixed when respondents were asked about their level of agreement related to the amount of staff time and effort required. Responses suggest that the OHP is effectively communicating and collaborating with partner schools in North Dakota.

Respondents also indicated high levels of satisfaction with the dental providers that provided services at the respondent’s school. Respondents were in near unanimous agreement that the dental providers were easy to contact and communicate with. Respondents also indicated near unanimous agreement that the dental providers were knowledgeable about oral health and were considerate to staff and students. Responses suggest the dental providers are viewed favorably by respondents.

Written materials were the most frequently used method of communication. Nearly all participating schools used written materials to communicate with parents. Digital communications were used by far fewer schools. However, digital communications, specifically smart phone aps, social media, and text alerts were percieved to be more effective methods of communication. Given that communication with parents is critical to informing parents about the program and obtaining consent for student participation, the OHP may want to reach out to schools using digital technology to learn more about their digital communication methods to faciltate utilization of digital communications at other schools. Digital commuications may also offer an opportunity to address issues with otaining consent. Respondents most frequently agree that getting parents to return paper forms was a challenge to obtaining consent for student participation. High response rates reinforce these conclusions.

Conclusions

Overall, Seal!ND has effectively targeted and delivered a school-based dental sealant program using widely accepted best practices targeting underserved students. The program has successfully improved the oral health of the target population by preventing cavities and avoiding costs associated with restorative care. The program has also sucessfully partnered with participating schools as evidenced by the high level of satisfaction of school administrators and others that interact with the program and the personnel that deliver the services of the school-based sealant program.

By engaging with more dental health providers to offer a school-based sealant program, the OHP has successfully grown the capacity of the sealant program. Increasing the number of schools that offer a school-based sealant program increases the number of students with sealants which ultimately prevents more cavities in North Dakota children. Referring students for additional care when needed will hopefully translate into an increase in the percentage of children with a dental home. The ability of the OHP, private practice providers, and FQHCs to bill Medicaid has provided the opportunity for growth in the short-term and sustainability in the long term.

Reporting issues in 2017-18 associated with the exclusion of private practice providers and FQHCs data from the analysis have been addressed in 2018-19. Data from students screened in all schools that met the 45 percent free and reduced-price lunch participation threshold were included in the analysis. However, reporting performance metrics and findings from all participating schools and not just those the meeting the 45 percent threshold would provide a more complete assessment of the impacts of North Dakota's Oral Health Program.

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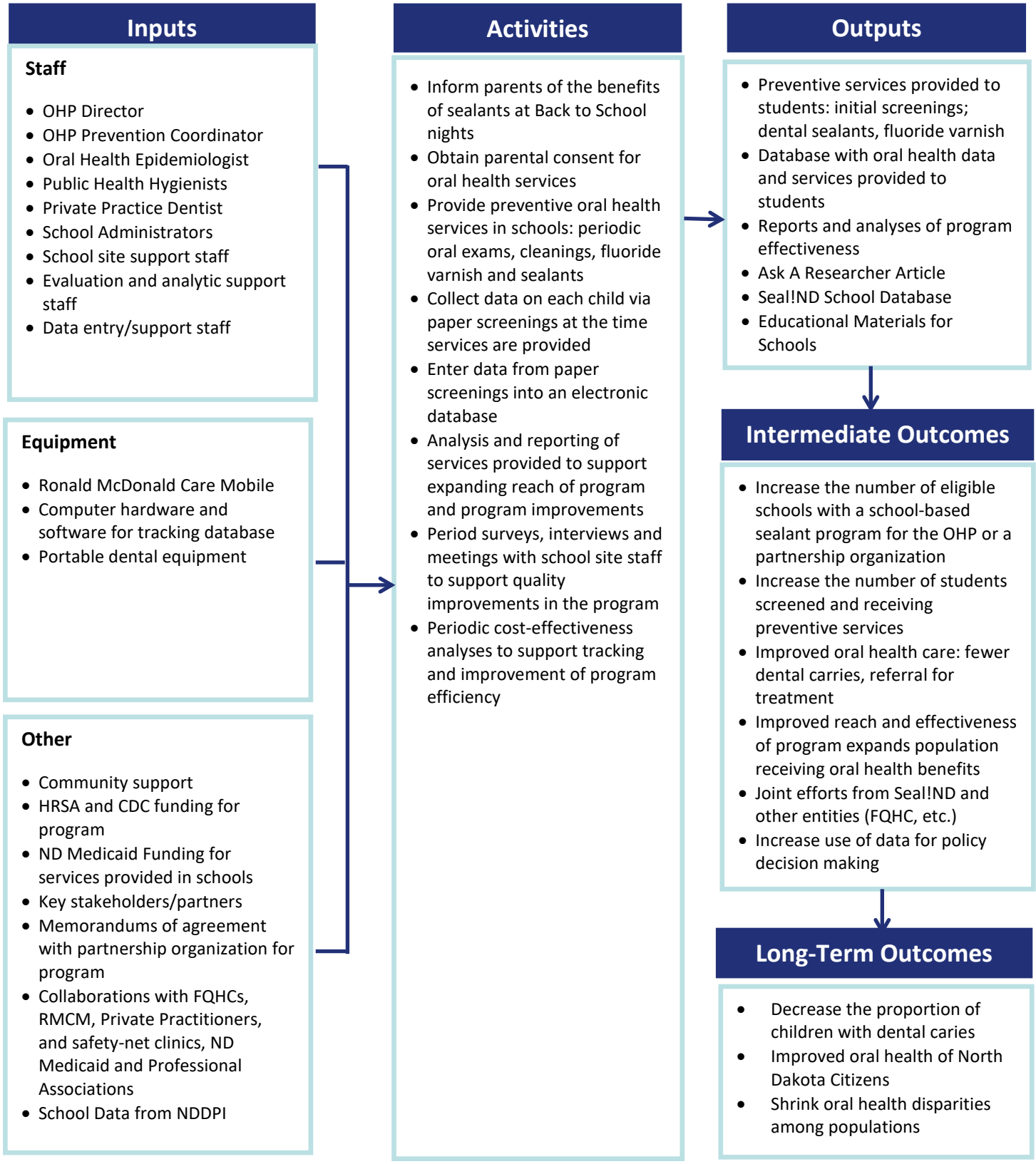
Appendix A
Focused Evaluation Design: School-Based Sealant Program

North Dakota Oral Health Program Logic Model: School-Based Sealant Program



Appendix B
Participating School Survey: Answers to Open-Ended Questions, 2016-17 and 2017-18

Answers to Open-ended Questions, 2017-18

1. **Whether the respondent thought it would be helpful to receive additional information/communication about the dental sealant program, and the types of additional information/communication would the respondent like to receive.**
   - Program is good
   - NA
   - The fliers were given out kind of late, but we were still able to manage and get the kids signed up.
   - I would love something that we can either stick in our newsletter or put on our website/Facebook page to get the information out to parents in more ways.
   - [Name] is outstanding and has done a fantastic job with our 576 students. There is nothing I would change about this program. The only thing we want to request [Name] EVERY YEAR
   - None needed.
   - We had some parents who were wary about the insurance/medicaid information this year. They were afraid that they would have to pay for it in the end. A hand-out geared to answer those sort of questions would be great to send home. Also, information about if you get sealants at your dentist, could you need them again, etc.
   - Word of mouth seems to be the way to go in our small school setting.
   - No
   - Received all the information necessary.
   - Yes, Parental information
   - A simple brochure for families would be nice.
   - Any pamphlets regarding general oral hygiene/care that can be shared with family are always welcome

2. **The respondent's suggestions on how the program might be able to improve the percentage of parents/care givers who sign their children up to receive these services.**
   - I believe that, in our school anyway, most students who chose not to participate did so because they were already receiving services from their dentist. Most students who were not regularly seeing a dentist chose to participate in this program.
   - Personal phone calls to the parents?
   - NA
   - Again, maybe just something we can put on our website or the Facebook page so they know it's coming. Also, maybe a place they can go online to sign up their kids in case they didn't receive the form.

- We on our end need to continue to make every effort to get all of our children these needed services. We have a huge poverty population and want to really contact parents face-to-face to get these children seen.
- Maybe a mailing with information
- Probably more information to do with the above question.
- I think the form was confusing. Parents thought that if they took their students to a dentist regularly, that they couldn't or shouldn't sign up.
- Ample communication with all parents was in place.
- None
- Not really...parent participation is often hard to muster

3. **Repondents' feedback on whether any portions of the program were particularly burdensome to school staff and suggestions for alleviating the burden.**
   - No
   - MA
   - No, I don't think it's at all burdensome.
   - Absolutely nothing is burdensome. We are extremely happy with these services and appreciate you having [name] (who already knows our staff, parents and students) come back each year.
   - Nope....it's super easy.
   - NO
   - No
   - The school's responsibilities in the program were efficiently organized and easy to implement.
   - No, No
   - Would like a little more notice prior to scheduling date for visit.
   - Not at all a burden

4. **Respondents' suggestions for improving the school-based dental sealant program.**
   - No
   - Feedback from families that they received from their dentists is that the sealants were not "quality?" Or not done correctly. The dentists removed them and replaced.
   - I don't.
   - We were talking about holding a Health Fair so we could get more community students to take advantage of your great services. We are so thankful for everything you do.
   - I think you guys do a great job with this program.

- No
- No
- No
- Great program so I hope it will be available in the future.

Answers to Open-ended Questions, 2016-17

1. **Whether the respondent thought it would be helpful to receive additional information/communication about the dental sealant program, and the types of additional information/communication would the respondent like to receive.**

- How to get signed up again..... Student training or a Unit based on Healthy Teeth/Gums. Online Resources we can put in our "Parent Resource" pages
- Flyers or articles that we could disseminate to our patrons.
- Adequate as is
- I don't recall...was there a press release sent to the Jamestown Sun by your agency/organization? That might gain some attention.
- We thought this was a very good idea. I believe the parents also thought so.
- The program is a huge plus for our school. We have a high level of poverty, and we have children who don't get to the dentist like they should. If programs like this weren't coming into the schools, they would have no dental assistance.
- Maybe a simple checklist of things that need to be done for the service.
- We truly appreciated being able to get the info before school started to put in our Back to School information. We had great turnout for our first year! If anything, perhaps a[n] e-blast or notification to share out on our JPS app.
- Maybe some kind of pamphlet with the sealant program information.
- Information received was more than adequate.
- The information/applications that we receive are adequate
- I really can't think of anything. Next year we will have an app for our school and we can use that to notify parents more easily.
- Who should not be involved in this program and for what reason. Ex. Just had this work done!
- This was the first year that my school participated in the program. I would like to set this up earlier in the fall next year so communication in August would be wonderful.
- There was a sufficient amount of information.
- No
- NA
- I guess I thought the communication was excellent and have no additional needs.
- The information was informative.
- No
- No - program has worked.
- I think what we receive is enough. Anything else to send home to the parents would be white noise.

- No, I think it's sufficient.

2. **The respondent's suggestions on how the program might be able to improve the percentage of parents/care givers who sign their children up to receive these services.**

- If we can get a longer window --- Being able to get these releases out before Parent-Teacher Conferences.
- Need to get the word out on this program, it is a great opportunity for some parents.
- Educating parents prior to the sign up date. Possibly send a flyer to PO Box prior to introducing it at the school level.
- I think you have provided good information. We will continue to promote this at parent meetings and through our news letter and notes home; additionally we will do a 'signage blitz' in advance of the fall visit.
- I was very pleased with the total program.
- N/A
- Quick easy flyer explaining the procedure and program.
- NA
- No.
- No.
- Our school is a magnet school for the English Learners so we have families who may not understand completely what the program provides. We have 17 different languages that are spoken by our student body in their homes.
- Again, I think that is more on us than you. I think that we could work a little harder to get this information out to the families.
- no
- I think sending a text message with the REMIND app would be potentially very helpful. In my experience many parents respond to text messages when they don't check the backpack or read the newsletter.
- Social media ads
- Since we are a boarding school this issue did not apply to us.
- no suggestions
- No
- We take care of that - big help from Public Health.
- No. I think those who want to do it, sign up. The others may already have the sealant applied during their regular dental visits.
- No

3. **Respondents' feedback on whether any portions of the program were particularly burdensome to school staff and suggestions for alleviating the burden.**

- Your team works so well with our staff and students. Wonderful Program
- None.
- Well run program with few/no concerns
- None

- It is hard to please everybody. This is why we have administrators.
- N/A
- Super easy from the school's perspective.
- NA
- No
- No.
- No burden here
- No - they are great!
- No
- I don't feel it was burdensome at all. The teachers knew it was coming so they were prepared for it.
- The only time it becomes a struggle is when we need to walk students down and wait with them to be seen. This requires the day for a staff member but I don't see many ways around it. Sometimes it is a bit of a challenge for the Social Worker to make sure that the needs get addressed. We have many ELL families and some of them don't yet have medical assistance so that has been a time consuming piece. But it is very much worth it to have the kids' dental needs met.
- Our building is very limited for extra space; therefore we had to do some shifting with students and staff. The dental work created a lot of noise, therefore is distracting. This was the most burdensome portion of the program. It would be nice to see a portable spot that is brought in for the program so this is not an issue.
- No
- None
- The program is run well. Everything is good from our standpoint.
- No, I really appreciate [the program] coming out to the schools.
- No. I think the program is very easy for us! All we have to do is send home the consent form and make sure the kids go get it done when the day comes.
- Timing. Start up of school is extremely busy and this is an additional job. No way to problem solve.
- Not at all.

4. Respondents' suggestions for improving the school-based dental sealant program.

- Keep it as great as it is.... We appreciate it.
- no
- None
- I enjoyed working with the program. It also gave some hands-on practice for some senior girls who were planning on going into the dental field.
- N/A
- None
- We absolutely loved our first experience! [Name] was amazing with our students and staff!
- No
- No.

- none
- We ask for and receive toothbrushes as we have kids who don't have them. We also have our youngest kids brush their teeth in school as for many of them this doesn't happen at home. Getting small tubes of toothpaste would help!
- No
- I think it is a wonderful program.
- None
- No
- Three staff members from our school reported that all of their children who go to different dentists had to have their sealants replaced when they went to the dentist because the ones done at the school had either fallen out (were not there) or were not done correctly.
- No
- Good program - don't change.
- I don't.
- Do parents receive any feedback after services??? We have a Back to School Night every year. Might be a great opportunity to share information. Organizations have a table with information and answer questions for parents that need answers.
- Not at this time.

Appendix C
Participating School Survey Questionnaire

ND School-based Dental Sealant Program Survey 2018-2019

Start of Block: 1. Survey Introduction

The following brief survey asks about your school's experience with the School-based Dental Sealant Program. It should only take about 5-10 minutes to complete.

Your feedback will help us understand how to better align these services with the operations of the school sites.

Thank you for your participation in this survey!

Q1. Please indicate your level of agreement with the following statements about your school's experience with the dental sealant program.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
A) We were well informed by the dental provider about the dental sealant program offered at our school. (1)	○	○	○	○	○
B) We had sufficient information to promote the dental sealant program. (2)	○	○	○	○	○
C) We understood our roles and responsibilities in delivering the dental sealant program. (3)	○	○	○	○	○
D) Performing our school's roles and responsibilities in the dental sealant program took a great deal of staff time and effort. (4)	○	○	○	○	○
E) We had sufficient communication with the dental provider to coordinate the delivery of services. (5)	○	○	○	○	○
F) We had sufficient communication with the dental provider, regarding the operation of the dental sealant program. (6)	○	○	○	○	○

Q2. Please indicate your level of agreement with the following statements about your school's experience with the dental hygienist/dental care provider.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
A) It was easy to get in touch with the dental provider. (1)	○	○	○	○	○
B) It was easy to communicate with the dental provider. (2)	○	○	○	○	○
C) The dental provider was knowledgeable about oral health care. (3)	○	○	○	○	○
D) The dental provider was considerate to staff and students. (4)	○	○	○	○	○

Q3. What type(s) of media/communication do you use to inform parents about school announcements and various programs and activities at your school? Choose “Yes” to all that apply.

	Do you use this type of media/communication?	
	Yes (1)	No (2)
Newsletters (1)	○	○
Press release (2)	○	○
Brochures/pamphlets (3)	○	○
School website (4)	○	○
Social media: Facebook (5)	○	○
Social media: Twitter (6)	○	○
Social media: Instagram (7)	○	○
Text alerts (8)	○	○
Email (9)	○	○
Smart phone apps (designed for school specifically) (10)	○	○
Direct mail (11)	○	○
Written materials sent home with students (12)	○	○
Others (Please specify in below) (13)	○	○

Q3.1. Please indicate the level of effectiveness on the type (s) of media that you answered "Yes" to on Q3.

	Not Effective (1)	Slightly Effective (2)	Moderately Effective (3)	Effective (4)	Very Effective (5)
Newsletters (14)	○	○	○	○	○
Press release (15)	○	○	○	○	○
Brochures/pamphlets (16)	○	○	○	○	○
School website (17)	○	○	○	○	○
Social media: Facebook (18)	○	○	○	○	○
Social media: Twitter (19)	○	○	○	○	○
Social media: Instagram (20)	○	○	○	○	○
Text alerts (21)	○	○	○	○	○
Email (22)	○	○	○	○	○
Smart phone apps (designed for school specifically) (23)	○	○	○	○	○
Direct mail (24)	○	○	○	○	○
Written materials sent home with students (25)	○	○	○	○	○
Others (Please specify in below) (26)	○	○	○	○	○

Q3.2. Please specify your answer if you choose "Others" in the question above.

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Q4. What can the dental provider do to further support the program in your school? Please indicate your level of agreement with the following approaches.

	Not At All Helpful (1)	Slightly Helpful (2)	Moderately Helpful (3)	Helpful (4)	Very Helpful (5)
Develop social media content for Facebook, text messages, etc. (1)	○	○	○	○	○
Develop handouts of frequently asked questions (2)	○	○	○	○	○
Provide a list of providers that work with low-income families/accept Medicaid (3)	○	○	○	○	○
Develop materials that explain the program in easy-to-understand language (4)	○	○	○	○	○
Have a representative participate in Back-To-School-Night (5)	○	○	○	○	○
A direct mail piece of program info (6)	○	○	○	○	○
Develop pamphlets or brochures explaining the program (7)	○	○	○	○	○
Others (please specify in below) (8)	○	○	○	○	○

Q4.1. Please specify your answer if you choose "Others" in the question above.

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Q5. What are the challenges to obtaining the consent for participation in your school? Please indicate your level of agreement with the following statements.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Parents don't understand the program (1)	○	○	○	○	○
Parents are afraid they have to pay for the service provided (2)	○	○	○	○	○
Parents don't see consent materials (3)	○	○	○	○	○
Parents don't return consent forms (4)	○	○	○	○	○
Others (please specify in below) (5)	○	○	○	○	○

Q5.1. Please specify your answer if you choose "Others" in the question above.

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Q6. Please rate the following constraints to your school and your school staff.

	Not At All Burdensome (1)	Slightly Burdensome (2)	Moderately Burdensome (3)	Very Burdensome (4)	Extremely Burdensome (5)
A) Physical space for dental providers (1)	○	○	○	○	○
B) Time and efforts to process program information and consent form (2)	○	○	○	○	○
C) Time and efforts to answer questions from parents regarding the program (3)	○	○	○	○	○
D) Staff to walk students to dental providers (4)	○	○	○	○	○
E) Other time and efforts it takes from school staff members (please specify in below) (5)	○	○	○	○	○
F) Others constraints (please specify in below) (6)	○	○	○	○	○

Q6.1. Please specify your answer if you choose "Other time and efforts it takes from school staff members" in the question above.

_____

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Q6.2. Please specify your answer if you choose "Other constraints" in the question above.

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Q7. Will you please provide any additional feedback/suggestions on how we can improve the dental sealant program? Your input would be critical.

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