Promoting and Increasing Sealant Utilization Strategies

Chapter 4

In North Carolina, 17% of children ages 6-9 enrolled in Medicaid and 19% of similar age children enrolled in NC Health Choice received a sealant in federal fiscal year (FFY) 2012.[a,1] National data show 40% of children ages 2-8 have dental caries in their primary teeth and 21% of children ages 6-11 have dental caries in their permanent teeth. In primary teeth, 44% of the caries are found in pits and fissures, whereas in permanent teeth, 90% of caries are found in pits and fissures.[2] Evidence demonstrates that pit and fissure sealants prevent caries in children and adolescents by up to 81% at two year follow-up.[3] Nationally only 30.5% of permanent molars in children ages 6-11 have been sealed.[2] Despite their clear effectiveness, sealants continue to be an underutilized prevention tool, especially among low-income children and adolescents who are more likely to be eligible for Medicaid or NC Health Choice.[4]

Despite their clear effectiveness, sealants continue to be an underutilized prevention tool, especially among children enrolled in Medicaid and NC Health Choice.

Sealants 101

As described in Chapter 2, sealants are clear or opaque materials applied to the rough surfaces, called pits and fissures, of premolars and molars to prevent tooth decay. They may be resin-based or glass ionomer cements and can be placed using multiple techniques. Sealants prevent food, bacteria, plaque and other debris from collecting within the pits and fissures of vulnerable teeth.[4] Sealants are designed to withstand normal wear, but must be monitored and, if necessary, reapplied to ensure long-term effectiveness.

Dental caries is an infectious disease that may be active and progressing or arrested. Treatment depends on the stage of the disease and how fast it is progressing. Sealants may be placed as primary prevention to avert onset of caries or as secondary prevention to arrest progression of caries to cavitation. Sealants reduce caries in permanent first molars of children up to 76% after four years when reapplied as needed. After 9 years, sealants reduce caries by 65%, even when sealants were not reapplied during the last 5 years. Compared with unsealed teeth, pit and fissure sealants reduce caries for up to five years after sealant placement.[5] Further evidence shows that sealants are effective in reducing dental caries by approximately 60% among children ages 6-17 from various socioeconomic levels and with varying levels of caries.[4]

Clinical recommendations from the American Dental Association (ADA) Council on Scientific Affairs addressed the use of pit and fissure sealants for primary and secondary prevention in both primary and permanent teeth. They also recommended that pit and fissure sealants be placed on early (noncavitated) carious lesions in children, adolescents, and young adults to reduce the percentage of lesions that progress.[5]

a It is important to note that the target is not 100% in a year. If the goal is to have 100% of children have sealants on permanent molars by age 9, we would expect about 25% of 6-9 year olds to get their molars sealed in any given year.

Evidence from national Medicaid claims data shows program benefits of sealant use. Children who were enrolled continuously in Medicaid for four years who had their permanent molars sealed were less likely to need restorative treatment than those who had not. In addition, among children who did need restorative work, sealants also helped protect teeth for a longer time than for those whose teeth were not sealed. The restorations were also less extensive in the sealed permanent molars than those in permanent molars that were unsealed.[5]

Despite the well-supported case for their use, sealants are not highly utilized in oral health prevention. In North Carolina, 17% of children ages 6-9 enrolled in Medicaid in FFY 2012, and 19% of children ages 6-9 enrolled in NC Health Choice received a sealant on a permanent molar in FFY 2012.[1]In FFY 2011, nationally 19% of children ages 6-9 enrolled in Medicaid received a sealant.[1] Counties in North Carolina show wide variation in sealant utilization rates from 6.9% in Clay to 27.8% in Washington for children on Medicaid, and 13% in North Hampton and Mitchell to 35% or higher in four counties for children enrolled in NC Health Choice. (See Appendix C.)

The Task Force set the following as Goal 2 for North Carolina: increasing the proportion of children ages 6-9 enrolled in Medicaid or NC Health Choice (enrolled for at least 90 days) who receive a dental sealant on a permanent molar tooth by 10 percentage points, from FFY 2012 to FFY 2017.

Promoting and Increasing Sealant Use

The Centers for Medicare and Medicaid Services identified increasing the rate of children ages 6-9 enrolled in Medicaid or CHIP who receive a dental sealant on a permanent molar tooth by 10 percentage points over a 5-year period as the second goal in their oral health initiative.[6] The Task Force set the following as Goal 2 for North Carolina: increasing the proportion of children ages 6-9 enrolled in Medicaid or NC Health Choice (enrolled for at least 90 days) who receive a dental sealant on a permanent molar tooth by 10 percentage points, from 17% to 27% for children enrolled in Medicaid and 19% to 29% for children enrolled in NC Health Choice, over a five-year period from FFY 2012[b] to FFY 2017. The Task Force on Children's Preventive Oral Health Services identified existing access barriers and their root causes. The Task Force focused on increasing sealant use among dental providers, Medicaid policy issues, and reducing access barriers for families and children.[c] These targeted barriers are specific to sealants, in addition to the general issues to increase the receipt of preventive dental services more generally, as discussed in Chapter 3.

Dentists

- Some dentists are reluctant to place sealants on the teeth of low-income children when there is incipient decay due to the fear that the child will not be a client long enough to fix sealants if a sealant fails. This underutilization points to a need for dental provider education and training on use of sealants.[7]

b For the purposes of this report we are using FFY 2012 as the baseline year. CMS has not yet defined the baseline year for this measure for their requirements, therefore, the baseline year may need to be changed once CMS has decided on a baseline year.

c The Task Force also looked at what primary care providers can do to increase preventive oral health care utilization. These recommendations are covered in Chapter 5.

Medicaid and NC Health Choice Policies

- Medicaid reimbursement for sealants is too low.[8] Currently dentists in North Carolina's Medicaid and NC Health Choice program are paid $28.58 per sealed tooth, 58% of the median national fee.
- Medicaid benefit policy does not align with evidence on sealants regarding the number of times they can or should be applied. Medicaid and NC Health Choice reimburse just once to seal each tooth, despite the evidence that sealants fail at a rate of 5-10% per year.[9]

Families

- Many families do not understand the importance of dental sealants for their children, and therefore do not seek such care for their children.[6]
- Some families have difficulties taking their children to a dentist during work hours. There is a lack of access points to obtain sealants outside the dental office.[6] This is discussed more fully in Chapter 6.

The Task Force developed four recommendations to address Goal 2.

As noted in Chapter 3, the Task Force considered a number of strategies to address the identified barriers, and prioritized those strategies based on their potential impact and whether the strategies were actionable and achievable (both politically and financially). The Task Force's four recommendations to increase by 10 percentage points the proportion of children ages 6-9 enrolled in Medicaid and NC Health Choice who receive a dental sealant on a permanent molar tooth are described below.

Recommendation 4.1: Increase reimbursement for dental sealants

Recommendation 4.2: Allow reapplication of sealants when necessary

Recommendation 4.3: Increase private sector efforts to encourage dentists to provide sealants for participants in Medicaid and NC Health Choice

Recommendation 4.4: Encourage primary care providers to educate families about the importance of sealants

Increase Reimbursement for Dental Sealants

In state fiscal year (SFY) 2012, DMA's total expenditure for sealants was the 7th largest Medicaid dental expenditure for children. The total that DMA spent on sealants was less than what DMA spent on four different restorative procedures, including one and two surface composite fillings on a posterior tooth, orthodontic treatment, and a primary stainless steel crown. Currently, DMA reimbursement for the three restorative procedures and one orthodontic service range from $76.00 for a one surface composite filling to $141.39 for a

stainless steel crown on a primary tooth.[d] DMA pays $28.01 for sealants. With fewer restorative services and more time between them, DMA *may* lower expenditures.[10] These savings could be reinvested into the program to increase reimbursement for dental sealants.

In addition to the administrative barriers discussed in Chapter 3, low reimbursement is also barrier to dentist participation in Medicaid and NC Health Choice. North Carolina Medicaid paid $28.58 in 2011 for sealants while the National Dental Advisory Service national median was $49.00. Increasing the reimbursement for dental sealants to the national median would cost less than the least expensive restorative service. In a study by the National Academy for State Health Policy, when six states increased Medicaid reimbursement rates, access to dental care improved.[e] By increasing reimbursement as part of a larger strategy, the states increased provider participation and the numbers of patients treated.[8] These increases in participation and patients treated could help North Carolina with both CMS goals. Increasing reimbursement will most directly affect goal 1—increasing preventive oral health services, but may also indirectly affect goal 2—increasing the use of sealants. There are many strategies to increase reimbursement, therefore the Task Force recommends:

Recommendation 4.1: Increase Reimbursement for Dental Sealants

The Division of Medical Assistance (DMA) should explore changes in Medicaid payment policies to increase reimbursement to the 75th percentile of a commercial dental benchmark for dental sealants. DMA should explore the possibility of increasing payments for sealants using a pay-for-performance model or other reimbursement strategy that is based, in part, on the number of children eligible for Medicaid or NC Health Choice ages 6 through 9 who receive a sealant on a permanent molar.

Change Medicaid Policy to Allow Reapplication of Dental Sealants When Needed

The current benefit package for Medicaid and NC Health Choice includes sealants for primary molars (patients under age 8) and permanent molars (patients under age 16) only once per lifetime per tooth. Medicaid statute[f] requires state Medicaid programs to provide Early and Periodic Screening, Diagnostics, and Treatment (EPSDT) for recipients under 21 years of age for any medically necessary services (including dental services), if identified as part

d Casey, Mark. Dental Director, Division of Medical Assistance, North Carolina Department of Health and Human Services. Written (email) communication May 28, 2013.

e The increased reimbursement rate varied across the six states (AL, MI, SC, TN, VA, WA). When budgets permitted, the reimbursement rate mirrored the dentists' usual charges. If unable to meet that threshold, the reimbursement should at least cover the cost of providing service estimated between 60-65% of the dentists' charges.

f 42 U.S.C.§ 1396d(r) [1905(r) of the Social Security Act]

of a screening—even if the service is not normally covered or if it exceeds the policy limits. Under EPSDT, Medicaid will pay for reapplication of dental sealants for moderate to high-risk children. However, the dentist must request an exception from normal coverage limits. DMA would determine if the child was at low, moderate, or high risk for decay based on caries history. If the child is at moderate to high risk, based on the records submitted by the provider and a review of paid claims, the request would be approved as medically necessary.[g,11]

Research reviewed by the American Dental Association Council on Scientific Affairs showed lowered effectiveness of sealants over time. Other studies report that sealants fail at a rate between 5% and 10% each year. With routine maintenance, sealants can prevent caries at rates of 80% to 90% after ten years or more.[9]

Allowing reapplication of sealants will help North Carolina meet both its CMS goals. Sealant reapplication will increase the use of preventive services for goal 1 and increase the use of sealants for goal 2.

DMA has the authority to change clinical policies for Medicaid and NC Health Choice,[h] after consultation with the North Carolina Physician Advisory Group (PAG).[i,12] The PAG is charged with reviewing clinical policies and recommending new Medicaid coverage policies. The PAG includes representatives from different health specialties, and includes a dental committee to review dental policies.

Placing a sealant without the ability to receive payment for repairs when necessary may discourage some dentists from utilizing sealants as preventive services. The Task Force discussed the lack of reimbursement for repairing, replacing, or restoring sealants as a hindrance to increasing their use. The Task Force concluded that Medicaid benefit policy should align with the best clinical evidence, therefore the Task Force recommends:

Recommendation 4.2: Allow Reapplication of Sealants When Medically Necessary

a) The North Carolina Dental Society should educate dentists about EPSDT and the ability to seek an exception from regular coverage policy to obtain reimbursement for the reapplication of sealants when medically necessary.

g Casey M. Dental Director, Division of Medical Assistance, North Carolina Department of Health and Human Services. Written Communication. May 22, 2013

h The PAG is currently charged with reviewing and making recommendations about Medicaid clinical policy decisions; however, the pending appropriations bill would expand that to include NC Health Choice clinical policy decisions. Section 12H.6(a) of Senate Bill 402 (2013).

i NCGS §108A-54.2

b) The Division of Medical Assistance Physician Advisory Group should create new coverage policies for Medicaid and NC Health Choice to allow reapplication of sealants on the same tooth when medically appropriate.

Encouraging More Dentists to Place Sealants on Permanent Molars for Children Eligible for Medicaid and NC Health Choice

North Carolina may have difficulties achieving the goal of increasing sealant utilization because of dentists' lack understanding of the ADA guidelines for pit and fissure sealants and their own clinical practice experience with sealants.

North Carolina may have difficulties achieving the CMS goal of increasing sealant utilization the number of children ages 6-9 years old who have a sealant on at least one permanent molar by 10 percentage points because of dentists' lack understanding of the ADA guidelines for pit and fissure sealants and their own clinical practice experience with sealants. In a recent national survey, less than 40% of dentists indicated they sealed non-cavitated carious lesions.[7] Many dentists are concerned that they will inadvertently seal over caries and that these caries will progress to cavitation underneath the seal. Dentists may not realize that the likelihood of a noncavitated carious lesion progressing to cavitation after being sealed is less than 2.6% each year.[13] Another common misconception is that loss of a sealant places the tooth at greater risk than if it was never sealed. When a sealant is partially or completely lost, the rate of caries formation is less than or equal to the rate in teeth that were never sealed.[14]

The Task Force recognized the need to reach out to practicing dental professionals (dentists, dental hygienists, dental assistants, and to a lesser extent, dental administrators) to educate them about the importance of sealants and the evolving science about when it is appropriate to place sealants. Newer dental professionals receive this training in dental school. However, many of the general dentists who have been practicing for longer periods of time lack the knowledge of the evolving science about sealants, and may have been discouraged from placing sealants due to specific cases when sealants failed.

The Task Force discussed different strategies to increase the use of sealants among practicing dentists. Task Force members recognized that other respected dentists in the community would have the most credibility in combating misconceptions about sealants. As discussed in Chapter 3, approximately 75% of practicing dentists in North Carolina are members of the North Carolina Dental Society (NCDS) making it an ideal organization to help disseminate accurate information to dentists. In addition to providing valuable information to its membership, NCDS sponsors the North Carolina Missions of Mercy (MOM) free mobile dental program. NC MOM provides diagnostic, preventive, and restorative dental services to underserved communities through one day dental clinics across the state.[15]

With the active participation and support of the NCDS, the Task Force identified different ways in which the NCDS could promote greater use of dental sealants for children on Medicaid and NC Health Choice.

Recommendation 4.3: Increase Private Sector Efforts to Encourage Dentists to Provide Sealants for Medicaid and NC Health Choice Participants

a The North Carolina Dental Society (NCDS) should promote the use of dental sealants and disseminate information about the efficacy of sealants by:

1) Including periodic articles in the gazette and in their electronic communications about sealant research. These communications should also highlight dentists who have placed sealants on a high proportion of Medicaid and NC Health Choice children. These stories should highlight the use of dental hygienists and dental assistant 2s in placing sealants, and show how these practices can generate profits even with relatively low Medicaid reimbursement rates.

2) Identifying dental opinion leaders who can help promote the use of sealants. This may include members of the NCDS Board of Directors or other dental opinion leaders who can help sway the opinions of general practitioners. These leaders can attend local dental society meetings and promote the use of dental sealants. The NCDS or local dental societies should offer Continuing Education (CE) credits to encourage dentists to attend these meetings.

3) Creating a dental video, hosted on the NCDS website, about the science behind sealants and information about how to properly place sealants. NCDS should seek continuing education (CE) credits for the video so that dentists and dental hygienists could view the video as part of their CE requirements.

b) NCDS, in partnership with Old North State Dental Society and the North Carolina Dental Hygiene Association (NCDHA), should expand existing efforts to provide sealants to children through the Give Kids a Smile/ MOMs effort.

c) To assist NCDS in identifying dental champions, as well as communities where greater outreach and education is needed, the North Carolina Division of Medical Assistance should provide data to the NCDS about:

1) **Pediatric and general dental practices that have placed sealants on a high percentage of their young (child) patients eligible Medicaid or NC Health Choice**

2) **Counties that have a very low percentage of children eligible for Medicaid or NC Health Choice who have received sealants**

3) **Other organizations, such as the North Carolina Area Health Education Centers and NCDHA, that provide continuing education for dental professionals, should increase their focus on sealants.**

Encourage Primary Care Providers to Educate Families about the Importance of Sealants

Most oral health services are provided by dental professionals. However, primary care professionals also have a responsibility to promote a child's oral health. As noted in Chapter 3 (and discussed more fully in Chapter 5), some primary care professionals provide dental varnish to young children under the age of 4, through the Medicaid Into the Mouths of Babes (IMB) program. Even if the physician is not participating in the IMB program, primary care professionals should assess a child's oral health, counsel children and their families on the importance of oral health, and help link families to a dental home as part of the Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, and as part of the Bright Futures recommended preventive services.[16] In addition, as noted in Chapters 3 and 5, CHIPRA quality improvement specialists are working with Community Care of North Carolina (CCNC) practices to promote oral health around fluoride varnish and annual dental visits. Thus, primary care clinicians should be educated about the importance of sealants in preventing caries, and encouraged to educate families about the importance of proper oral health more generally. In recognition of the vital role of primary care in health promotion and prevention, the Task Force recommends;

Recommendation 4.4: Educate Primary Care Providers about Sealants

The Division of Medical Assistance, Oral Health Section of the Division of Public Health, North Carolina Dental Society, Old North State Dental Society, North Carolina Academy of Pediatric Dentists, North Carolina Pediatric Society, North Carolina Academy of Family Physicians, the North Carolina Medical Society, Old North State Medical Society, Area Health Education Centers, and North Carolina Community Care Network should expand or create continuing education opportunities for primary care professionals to educate them on sealants. To accomplish this, these organizations should:

a) Develop a one-page primer on sealants for primary care providers.

b) Conduct outreach to primary care providers who are involved in the Into the Mouths of Babes program (IMB) and other primary care professionals, to educate them about the importance of sealants, and encourage them to educate the parents or caretakers of the children in their practice about the importance of having sealants placed on their children's permanent molars.

c) Expand the role of the CHIPRA quality improvement specialists who are promoting oral health among CCNC practices to also promote the use of sealants.

d) Encourage pediatric dentists to reach out to primary care providers to educate them about the importance of dental sealants.

e) Develop one-page educational materials about dental sealants that can be given to parents in pediatric or family practices, and/or create posters that could be posted in exam rooms.

Chapter 5 focuses more heavily on the role of primary care professionals in promoting positive oral health.

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