Update on the HRSA UDS Sealants Measure

Vy Nguyen, DDS, MPH
Dental Officer, Office of Quality Improvement
Bureau Primary Health Care, HRSA

Irene V. Hilton, DDS, MPH, FACD
NNOHA Dental Consultant

December 19, 2016
Objectives

- List results from the 2015 HRSA UDS dental sealants measure
- Compare the different methods for calculating the UDS sealants measure
- Recognize how your health center can improve the accuracy of the denominator for the UDS sealants measure
- Describe strategies for improving on the UDS sealants measure in 2016 and onward
UDS Dental Sealants Measure

December 19, 2016

Vy Nguyen, DDS, MPH
Dental Officer, Office of Quality Improvement
Bureau of Primary Health Care (BPHC)
Health Resources and Services Administration (HRSA)
Primary Care Mission and Strategies

Improving the health of the Nation’s underserved communities and vulnerable populations by assuring access to comprehensive, culturally competent, quality primary health care services.

- Increase access to primary health care services
- Modernize primary care infrastructure and delivery system
- Improve health outcomes and health equity
- Promote performance-driven, innovative organizations

Increase Value of Health Center Program
Oral Health/Primary Care Integration

HIT Implementation and Meaningful Use

Patient-Centered Medical Home

UDS Dental Sealant Measure
Dental sealants measure introduced to the UDS in 2015 to capture the percentage of children, age 6-9 years of age, at moderate to high caries risk, who received a dental sealant on a first permanent molar during the measurement period.

<table>
<thead>
<tr>
<th>Numerator</th>
<th>Children who received a sealant on a permanent first molar tooth during the measurement period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator (Universe)</td>
<td>Children 6 though 9 years of age who had a dental visit in the measurement period who had an oral assessment or comprehensive or periodic oral evaluation and are at moderate or high risk for caries in the measurement period.</td>
</tr>
</tbody>
</table>
UDS 2015 Dental Sealants Measure

<table>
<thead>
<tr>
<th>Numerator</th>
<th>121,312</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator</td>
<td>285,799</td>
</tr>
<tr>
<td>%</td>
<td>42.5%</td>
</tr>
</tbody>
</table>

Dental Sealants Measure, %

HP2020 Baseline: 25.5%
UDS 2015: 42.5%
HP2020 Goal – 28.1%
UDS 2015 Dental Sealants Measure

Percentage of children age 6-9 years of age at elevated caries risk, who received a dental sealant on a first permanent molar by state, UDS 2015
Dental Sealants Measure for UDS 2016

- 2016 UDS Manual
- Health centers providing dental services directly on site or through paid referral under contract must report dental patients age 6 through 9 who are at elevated risk for caries in the universe count
- Caries risk assessment based on patient-level factors and not population-based factors such as low socioeconomic status
- Capture/document all necessary data elements to report for the denominator (universe) and numerator
  - Integrate into clinical workflows, protocols, and processes
  - Leverage EDRs/EHRs
  - Random sample
Contact Information

Vy Nguyen
Dental Officer, Office of Quality Improvement
Bureau of Primary Health Care (BPHC)
Health Resources and Services Administration (HRSA)
Email: vnguyen@hrsa.gov
Phone: 301 827-9045
Web: http://bphc.hrsa.gov/qualityimprovement/clinicalquality/oralhealth
Twitter: twitter.com/HRSAgov
Facebook: facebook.com/HHS.HRSA
Sealants…update!
Why Choose Sealants

- Virtually prevents all pit and fissure caries
- About 80% of caries occurs in pits and fissures
- Nature incompletely fuses our enamel and we are at risk to get caries on occlusal surfaces, no matter how much fluoride exposure
Life Cycle of a Molar

Update to 2008 sealant guidelines & recommendations
Evidence-based clinical practice guideline for the use of pit-and-fissure sealants

A report of the American Dental Association and the American Academy of Pediatric Dentistry

John T. Wright, DDS, MS; James J. Crall, DDS, MS, ScD; Margherita Fontana, DDS, PhD; E. Jane Gillette, DDS; Brian B. Nový, DDS; Vineet Dhar, BDS, MDS, PhD; Kevin Donly, DDS, MS; Edmond R. Hewlett, DDS; Rocio B. Quinonez, DMD, MS, MPH; Jeffrey Chaffin, DDS, MPH, MBA, MHA; Matt Crespin, MPH, RDH; Timothy Iaffolla, DMD, MPH; Mark D. Siegal, DDS, MPH; Malavika P. Tampi, MPH; Laurel Graham, MLS; Cameron Estrich, MPH; Alonso Carrasco-Labra, DDS, MSc, PhD(c)

ABSTRACT

Background. This article presents evidence-based clinical recommendations for the use of pit-and-fissure sealants on the occlusal surfaces of primary and permanent molars in children and adolescents. A guideline panel convened by the American Dental Association (ADA) Council on Scientific Affairs and the American Academy of Pediatric Dentistry conducted a systematic review and formulated recommendations to address clinical questions in relation to the efficacy, retention, and potential side effects of sealants to prevent dental caries; their efficacy compared with fluoride varnishes; and a head-to-head comparison of the different types of sealant material used to prevent caries on pits and fissures of occlusal surfaces.

Types of Studies Reviewed. This is an update of the ADA 2008 recommendations on the use of pit-and-fissure sealants on the occlusal surfaces of primary and permanent molars. The authors conducted a systematic search in MEDLINE, Embase, Cochrane Central Register of Controlled Trials, and other sources to identify randomized controlled trials reporting on the effect of sealants (available on the US market) when applied to the occlusal surfaces of primary and permanent molars. The authors used the Grading of Recommendations Assessment, Development, and Evaluation approach to assess the quality of the evidence and to move from the evidence to the decisions.

Results. The guideline panel formulated 3 main recommendations. They concluded that sealants are effective in preventing and arresting pit-and-fissure occlusal carious lesions of primary and permanent molars in children and adolescents compared with the nonuse of sealants or use of fluoride varnishes. They also concluded that sealants could minimize the progression of noncavitated occlusal carious lesions (also referred to as initial lesions) that receive a sealant. Finally, based on the available limited evidence, the panel was unable to provide specific recommendations on the relative merits of 1 type of sealant material over the others.
Guideline Recommendations

1. Sealants prevent cavities in permanent & primary molars

2. Sealants can prevent the progression of early noncavitated carious lesions.

3. Resin or glass ionomer
Don’t recommend non-fluoride toothpaste for infants and children.

The benefit of fluoride-containing toothpaste arises from its topical effect on dental enamel by interrupting enamel demineralization caused by bacterial acids and enhancing remineralization of the enamel surface. Anti-caries (anti-cavities) benefit begins with eruption of the first primary tooth. Brushing with non-fluoridated toothpaste provides no anti-caries benefit. Use of recommended amounts of fluoride toothpaste minimize risks of fluorosis, a whitish discoloration of enamel.

Avoid restorative treatment as a first line of treatment in incipient (non-cavitated) occlusal caries without first considering sealant use.

High quality evidence shows sealants are safe and effective in arresting caries progression in initial stage (incipient) non-cavitated, occlusal caries. Sealants offer a tooth-preserving treatment when compared to restorations, which may require removal of some healthy tooth structure, thereby weakening the tooth and increasing the risk that the tooth will eventually require more extensive treatment. Applying sealants as soon as initial stage caries is detected can improve outcomes by minimizing the later need for more extensive restorative care.
Why Dentists Don’t Place Sealants

- Forget to treatment plan
- Low confidence in longevity
- Low confidence in materials, techniques
- Placing PRRs instead
- Non-belief in placing sealants over incipient decay-paradigm change
- Sealant placement not prioritized in treatment plan sequencing
Goal and Baseline for Healthy People 2020

- HP 2020 Baseline (from 1999-2004 study) 25.5%
  - For all children 6-9 years of age
  - For Black or African Am children 18.4%
  - For White not Hispanic children 30.1%

- HP 2020 goal for sealants on one or more permanent molars for 6-9 year olds 28.1%

- 2015 UDS 42%
Calculating the HRSA UDS Sealant Measure
Dental Quality Alliance Contacts

Diptee Ojha, PhD, MBA ojhad@ada.org
Lead Staff, Dental Quality Alliance
Senior Manager, Office of Quality Assessment & Improvement
Council on Dental Benefits Program

Krishna Aravamudhan, BDS, MS aravamudhank@ada.org
Director, Center for Dental Benefits, Coding and Quality
American Dental Association Practice Institute

Jill Boylston Herndon, PhD jill.herndon@keyanalyticsconsulting.com
Managing Member and Principal Consultant
Key Analytics and Consulting
Consultant to Dental Quality Alliance
Measure Overview: Sealants 6-9 Years

**NUM:** How many received a sealant on a permanent first molar in the reporting year

**DEN:** Of dental patients, aged 6-9 years at elevated caries risk, of record in the practice in the reporting year, who needed a sealant in a permanent first molar

Denominator Exclusions (subtract from denominator):
- All four molars are not candidates for sealants.
**Sealant Measure Reporting: Getting Started!**

How do I get started?

<table>
<thead>
<tr>
<th>Measure Component</th>
<th>Concept</th>
<th>Data Element Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator</strong></td>
<td>Age</td>
<td>Date of birth</td>
</tr>
<tr>
<td></td>
<td>Patient of record</td>
<td>CDT code (D0191, D0120, D0145, D0150, or D0180)</td>
</tr>
<tr>
<td></td>
<td>Elevated caries risk</td>
<td>CDT code (D0602 or D0603) or other documentation of caries risk assessment finding (low, moderate, or high)</td>
</tr>
<tr>
<td><strong>Numerator</strong></td>
<td>Sealant</td>
<td>CDT code (D1351)</td>
</tr>
<tr>
<td></td>
<td>Permanent 1st Molar</td>
<td>Tooth number</td>
</tr>
<tr>
<td><strong>Exclusions</strong></td>
<td>Non-Sealable Teeth</td>
<td>CDT codes (e.g., teeth already sealed, restored); patient findings (e.g., missing, un-erupted teeth); condition/problem lists (e.g., active decay)</td>
</tr>
</tbody>
</table>
Unless you have the latest EDR vendor upgrade that contains the HRSA UDS Sealants Measure solution you cannot compute the measure electronically.

You can compute with the following work-around:

If you have the upgrade, the following slides are happening automatically in the background.
What if I don’t have all of the data elements?

Current Reporting
- Identify what you can report on using data from electronic patient records
- Consider whether you can obtain more complete data for CY 2016 reporting through a random sample of charts (following UDS Reporting Instructions)

Future Reporting
- Assess the steps required to capture or improve structured data capture of the needed data elements electronically
- Engage key stakeholders – clinicians, staff, IT personnel, electronic record vendors

Improving documentation of services provided is a quality improvement initiative!
How was the data collected?

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Electronically on Universe &gt; 70</td>
</tr>
<tr>
<td>Electronically on Universe &lt; 70</td>
</tr>
<tr>
<td>Sample 70 charts from Universe &gt; 70</td>
</tr>
<tr>
<td>Review of all charts from Universe &lt; 70 charts</td>
</tr>
<tr>
<td>Vendor solution/upgrade</td>
</tr>
</tbody>
</table>
**DEN:** Dental patients, aged 6-9 years at elevated caries risk, of record in the practice in the reporting year who needed a sealant in a permanent first molar.

<table>
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<th>6-9 years</th>
<th>For CY 2016 UDS reporting: date of birth between January 1, 2007 – December 31, 2009</th>
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<td>of record in the practice</td>
<td>had an oral assessment (CDT D0191) OR a comprehensive or periodic oral evaluation visit (CDT D0120, D0145, D0150, or D0180)</td>
</tr>
<tr>
<td>elevated caries risk</td>
<td>at moderate to high caries risk (CDT D0602 or D0603) based on caries risk assessment</td>
</tr>
</tbody>
</table>
Are you able to get a count/list of all 6-9 y/o that were seen in your dental clinic for an exam (i.e. CDT 120, 150, 145, 180) or assessment (191) in a given month or year?
**DEN**: Dental patients, aged 6-9 years at elevated caries risk, of record in the practice in the reporting year who needed a sealant in a permanent first molar

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Acceptable Risk Assessment Tools

- American Dental Association
- American Academy of Pediatric Dentistry
- American Academy of Pediatrics
- Caries Management by Risk Assessment (CAMBRA)
- PreViser
Entering risk assessment codes in your EDR or encounter form (CDT codes D601, D602, D603)?

- Easy opportunity to go to the next level of accuracy
- Try out/PDSA a way to record D codes in EDR so can run report later
**Denominator Exclusions**

**Exclusions:** Children who otherwise meet the denominator criteria are subtracted from the denominator if **all four of the permanent first molars are non-sealable** in the measurement period.

**A “non-sealable” tooth:**
- unerupted
- missing
- already sealed
- has restoration (filled)
- fractured
- active caries/decay

None of the four permanent first molars have erupted: exclusion.

All four permanent first molars have been sealed: exclusion.
Denominator Exclusions

Current Reporting
- Evaluate exclusions based on the data you DO have available.
- You can still calculate the measure as NUM/DEN, even if you are unable to identify exclusions.
- Your % measure score will be lower if you are unable to identify eligible exclusions because that makes your denominator bigger.

Future Reporting
- Identify opportunities (and the steps that need to be taken) to enable better identification of children who are appropriately excluded from the measure during the reporting year.
Have vendor upgrade/solution?

Using a SMART/dummy code to identify kids that should not be included in the denominator?

- Harder opportunity to go to the next level of accuracy
- Determine if implementing SMART code feasible - small tests to implement clinic flow documentation
- If not using SMART code, denominator will be bigger and final % smaller - how important is this?
NUM: Children in the denominator who received a sealant on a permanent first molar

What counts:

✓ Any sealant placed on a permanent first molar during the reporting period regardless of whether it was placed before, on the same day as, or after the oral assessment/evaluation

✓ Sealants placed regardless of whether it was at the health center being measured or elsewhere – as long as it is documented

✓ Must be placed during reporting period
Able to get a count/list of all 6-9 y/o that had a sealant placed (i.e. CDT D1351)?
Sealant Measure Calculation: Recap

**NUM:** How many received a sealant on a permanent first molar in the reporting year

**DEN:** Of dental patients, aged 6-9 years at elevated caries risk, of record in the practice in the reporting year, who needed a sealant in a permanent first molar

= Measure Score
What if we don’t have an Electronic Dental Record system?


• Pg. 176- “health centers have the option of reporting on their entire patient population as a universe or to select a scientifically drawn random sample to review”

• 70 charts

• Exact process for selecting charts described
Do we include children in school-based prevention only programs?

Children who are health center dental patients and have sealants placed as part of an in-scope school-based dental program are counted in the UDS dental sealant measure.
Resources

- HRSA UDS Sealants Measure FAQ
  http://www.nnoha.org/resources/hrsa-sealant-measure-resources/hrsa-uds-sealant-measure-faq/

- HRSA UDS Sealants Measure webinar
  https://attendee.gotowebinar.com/recording/7152028840663582978

- Demystifying the HRSA Sealant Measure PowerPoint
Be Proactive

- Dental directors have no idea where their submitted numbers came from
- Dental directors whose health center did not submit 2015 data that were never asked about the measure
- Need for the dental directors and dental teams to play a more pro-active role in the submission of the UDS dental sealants measure
- Time period for submission of UDS Reports is *January 1 through February 15*
We Have Baseline Data… Now What?
HRSA QI Awards in 2017

- Will include improvement in the sealant measure as a possible award criteria
Set Your Next QI Sealant Goal

- 3/5 children 6-9 with sealable molars are not getting sealants

- Strategies for system change?
  - Train providers on latest sealant guidelines
  - Treatment plan more sealants
  - Place sealants at exam visit
  - Prioritize sealant appointment
  - Utilize most efficient team member to apply sealants according to State regulations
  - ???

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NNCHA
National Network for Oral Health Access
Quality Improvement & the HRSA Sealant Measure
Quality Improvement (QI)

- **An approach** to the analysis of performance
- Measuring where you are, figuring out how to improve
- Data establishes “baseline” and QI process develops methods to improve from the baseline
- Creates systems to improve outcomes
Opportunity for Improvement

The Gap

- Access to care (visit)
- Type of service (sealant)
- Cost (lower)
- Adverse patient event (ER visit)
- Oral health outcomes (caries free)
PDSA Cycle

- Shorthand for using the scientific method to test a change by planning it, trying it, observing the results, and acting on what is learned.
Repeated Use of the PDSA Cycle

Proposals, Theories, Ideas

Changes That Result in Improvement

Learning from Data
Can I use QI techniques to implement the sealant measure?

**Risk Assessment**
- What tool
- When to administer
- Who will administer
- How to document

**Exclusions**
- How to document
- Where to document

**Future Reporting**
- Improve structured data capture of the needed data elements electronically
- Better identification of children who are appropriately excluded from the measure
In conclusion

- *Don’t let difficulty in computing the measure distract you from the purpose!*  

- Pit and fissure sealants are **one of our most important interventions** in helping the high risk children we serve

- We assure a healthy future by sealing all pits and fissures!
Thank you!

Questions?