

Prevention in Action: Dental Sealants

Dental Provider Breakout Group

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Missouri Oral Health Coalition

6 Strategies to Improve Sealant Rates

Sealant prevalence increased by 35% among children

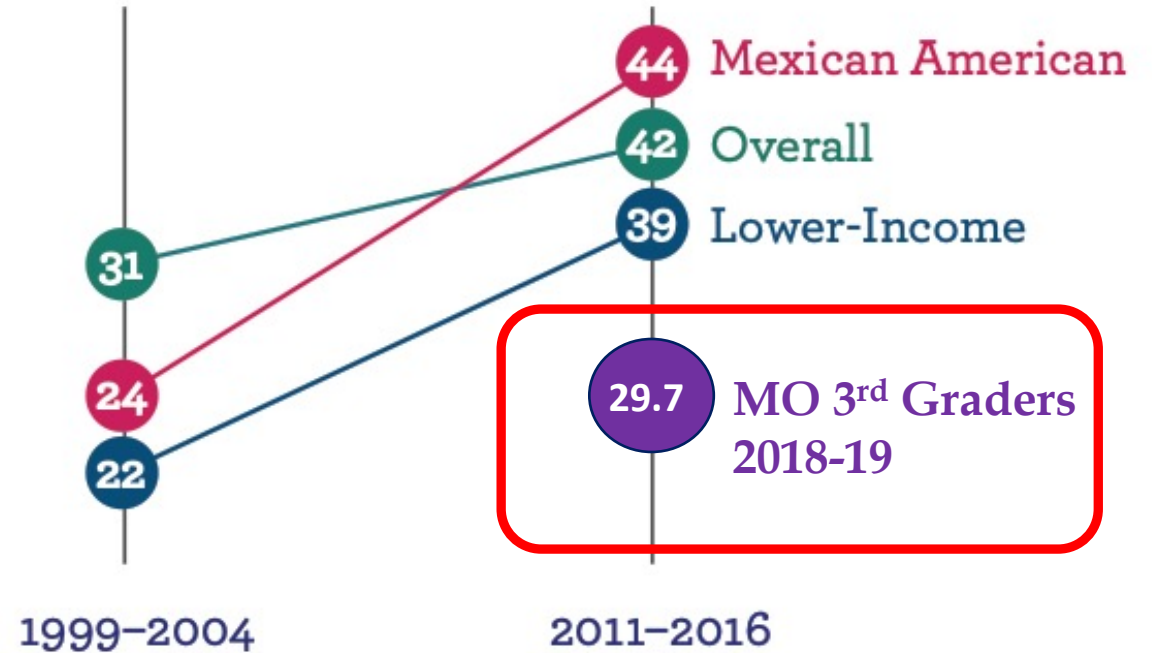


4 in 10 children aged 6–11 years had dental sealants on permanent teeth.

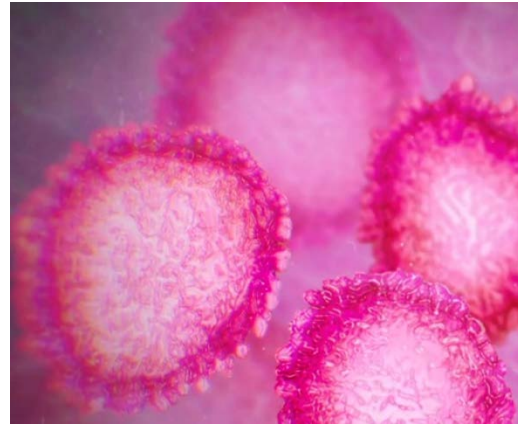
Sealant prevalence among **Mexican American** and **lower-income** children **nearly doubled**.

<http://bit.ly/OralHealthReport>

Percentage of children aged 6–11 with sealants



#6- Treatment Plan Sealants



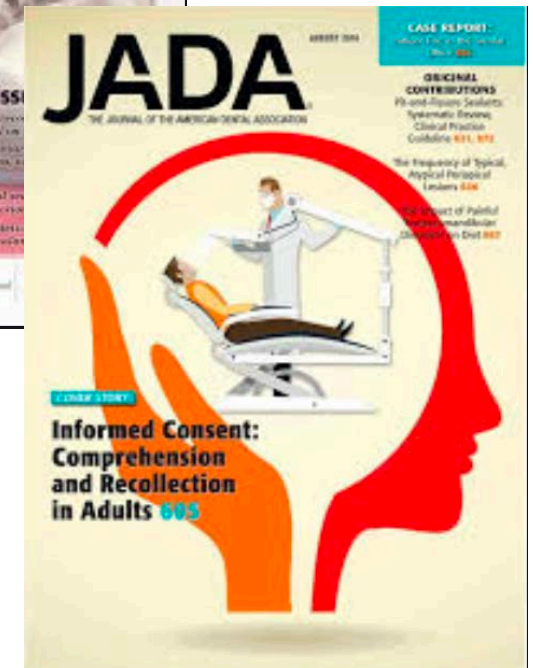
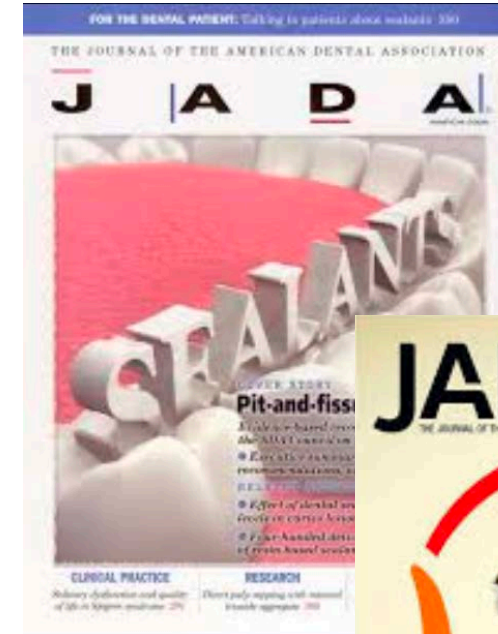
Sealants More Important than EVER!!!!

Polling

- I don't place as many sealants as I could because...(select one)
 - I don't believe they work to prevent cavities
 - They don't last long enough/fall off
 - I have had bad experiences with caries under sealants
 - I do place as many sealants as possible...I am not one of the people responsible for the 29.7% sealant rate!

Why Dentists Don't Translate Evidence into Practice

- General Trend in Health Care
 - 17 years for innovation to become widespread
- Lack of knowledge of evidence
 - CE choices
 - Journal reading
- Practice in isolation
 - Less clinical dialog
 - Less questioning of choices



Why Dentists Don't Translate Evidence into Practice

- Personality characteristics of dentists
 - Independent
 - Contrarian
 - Risk averse
- *Personal experience over everything else*
- *Challenge with “population” vs. “individual” concept*

Polling

(select one)

- I routinely seal over non-cavitated occlusal lesions
- I have never sealed over a non-cavitated occlusal lesion (or if I did it was an accident)

Popular Opinion

- 2009- *What follows are my candid thoughts on sealants. Many of you may not agree with my thoughts.*
- ***Along with many others, I contend that dental caries is an infectious disease that should be either prevented or surgically removed.*** *In the 1960s, significant academic research was published, alleging that when caries was “sealed into teeth,” the carious lesions became inert. However, any experienced practitioner who has cut out sealants has found overt, juicy, ongoing caries under the sealants, sometimes leading to pulp exposures.*
- 2011- *There has been significant confusion about when to seal a tooth with a sealant material. Originally, it was thought that when a carious tooth was sealed, the carious lesions were stopped or at least reduced in activity. That belief has been disproven. It is now known that aerobic organisms become anaerobic when they do not have oxygen, and that the lesions continue to be active.*

2008 & 2016 Evidence Based Guidelines

Grade of evidence: 1a- Evidence from systematic reviews of randomized controlled trials

- *Griffin SO, Oong E, Kohn W, Vidakovic B, Gooch BF, CDC Dental Sealant Systematic Review Work Group, et al. The effectiveness of sealants in managing carious lesions. J Dent Res 2008;87(2):169-174*
- *Oong EM, Griffin SO, Kohn W, Gooch BF, Caufield P. The effect of dental sealants on bacteria levels in caries lesions: a review of the evidence. JADA 2008;139(3):271*

- The sealant guideline panel recommends the use of sealants compared with non-use in primary and permanent molars with both sound occlusal surfaces **and non-cavitated occlusal carious lesions** in children and adolescents.

Non-Cavitated Lesions



Figure 1. Tooth surface with an early (non-cavitated) carious lesion that exhibits a white demineralization line around the margin of the pit and fissure and/or a light brown discoloration within the confines of the pit-and-fissure area. Image provided courtesy of Dr. Amid I. Ismail, the Detroit Dental Health Project (National Institute of Dental and Craniofacial Research grant U-54 DE 14261-01).

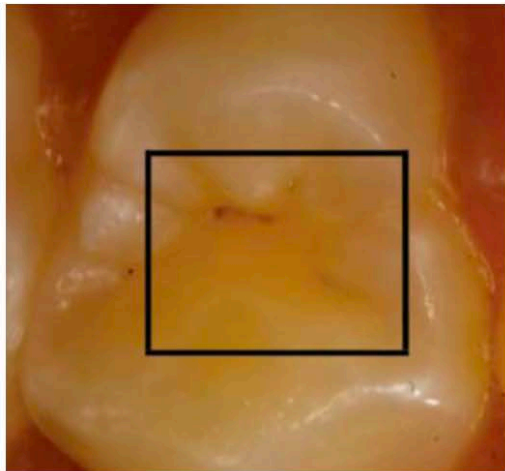


Figure 2. A small, distinct, dark brown early (non-cavitated) carious lesion within the confines of the fissure. Image provided courtesy of Dr. Amid I. Ismail, the Detroit Dental Health Project (National Institute of Dental and Craniofacial Research grant U-54 DE 14261-01).

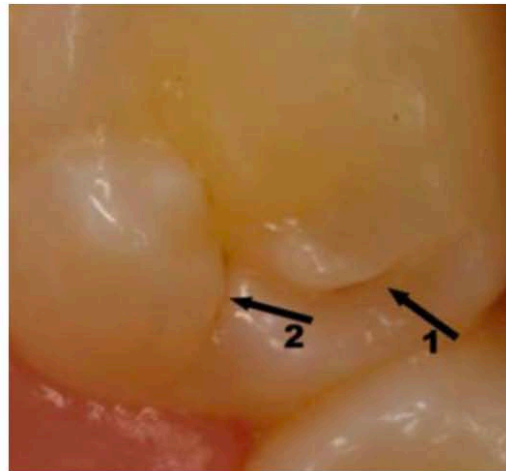


Figure 3. A deep fissure area (arrow 1) and another area exhibiting a small light brown pit and fissure (arrow 2). Note that the lesion does not extend beyond the confines of the pit and fissure. Image provided courtesy of Dr. Amid I. Ismail, the Detroit Dental Health Project (National Institute of Dental and Craniofacial Research grant U-54 DE 14261-01).

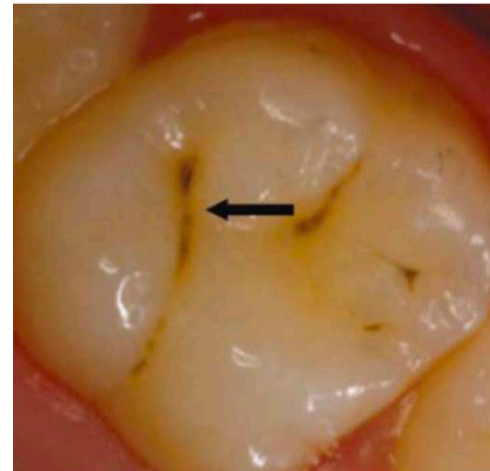


Figure 4. A more distinct early (non-cavitated) carious lesion (arrow) that is larger than the normal anatomical size of the fissure area. Image provided courtesy of Dr. Amid I. Ismail, the Detroit Dental Health Project (National Institute of Dental and Craniofacial Research grant U-54 DE 14261-01).

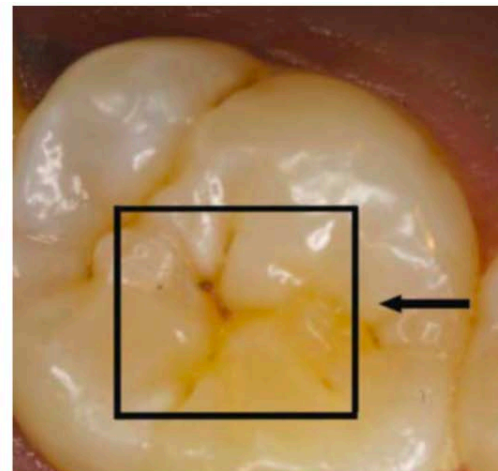
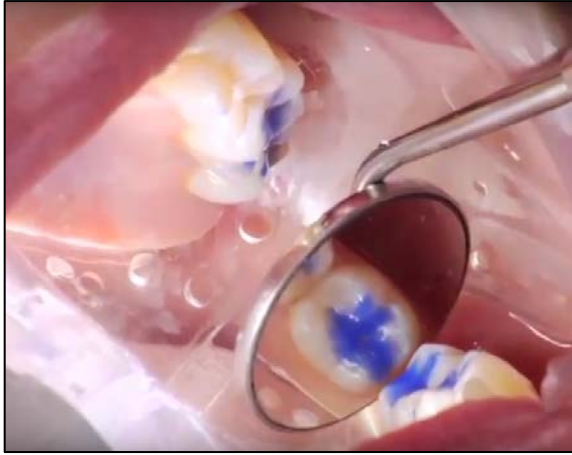


Figure 5. A more distinct early (non-cavitated) carious lesion (arrow) that is larger than the normal anatomical size of the fissure area. Image provided courtesy of Dr. Amid I. Ismail, the Detroit Dental Health Project (National Institute of Dental and Craniofacial Research grant U-54 DE 14261-01).

The Water is Fine

- Start small...ideal case selection
- Follow over time
- If BWX doesn't show dentin occlusal lesion... have confidence

#5 Equipment & Materials



Flashmax P3 Curing Light

[Write a Review](#)



[Description](#) [FAQ and Documents](#) [Special Offers](#)

Flashmax P3 Curing Light

World's most powerful curing light delivers 6000mW/cm² performance.

Undoubtedly the most powerful curing light on the market, **FlashMax P3** cures most composites in 1-3 seconds per layer! This speed and efficiency reduces both chair time and risk of cross-

Polling Question!

- How fast is your curing light for sealants?
 - 0-9 seconds
 - 10-19 seconds
 - 20-29 seconds
 - 30 seconds or more

Polling

- In my practice, when we place sealants we use the following isolation technique (check all that apply):
 - An all-in-one isolation device like Isolite, Dry-Shield, Mr. Thirsty
 - Old school Garmers Cotton Roll Holders & Dri Angles
 - Plain cotton rolls
 - Rubber dam
 - We do not place sealants in my practice

Fuji Triage Technique In a COVID-19 World



Identify teeth to be sealed partially/fully erupted



Clean plaque from occlusal surfaces with a wet cotton roll



Apply GC Cavity Conditioner, 10 sec. with microtip brush. Use very wet cotton roll (pressing down into grooves) to remove the cavity conditioner



Tap capsule on hard surface, Tap, Activate, Mix



Set into mixer, Mix 10 sec., high speed (approximately 4,000 RPM), 8 sec. for longer working time



Place capsule into capsule applicator. Prime (click 2x)



Extruded GI onto tooth with applicator. Press into occlusal surface with wet finger

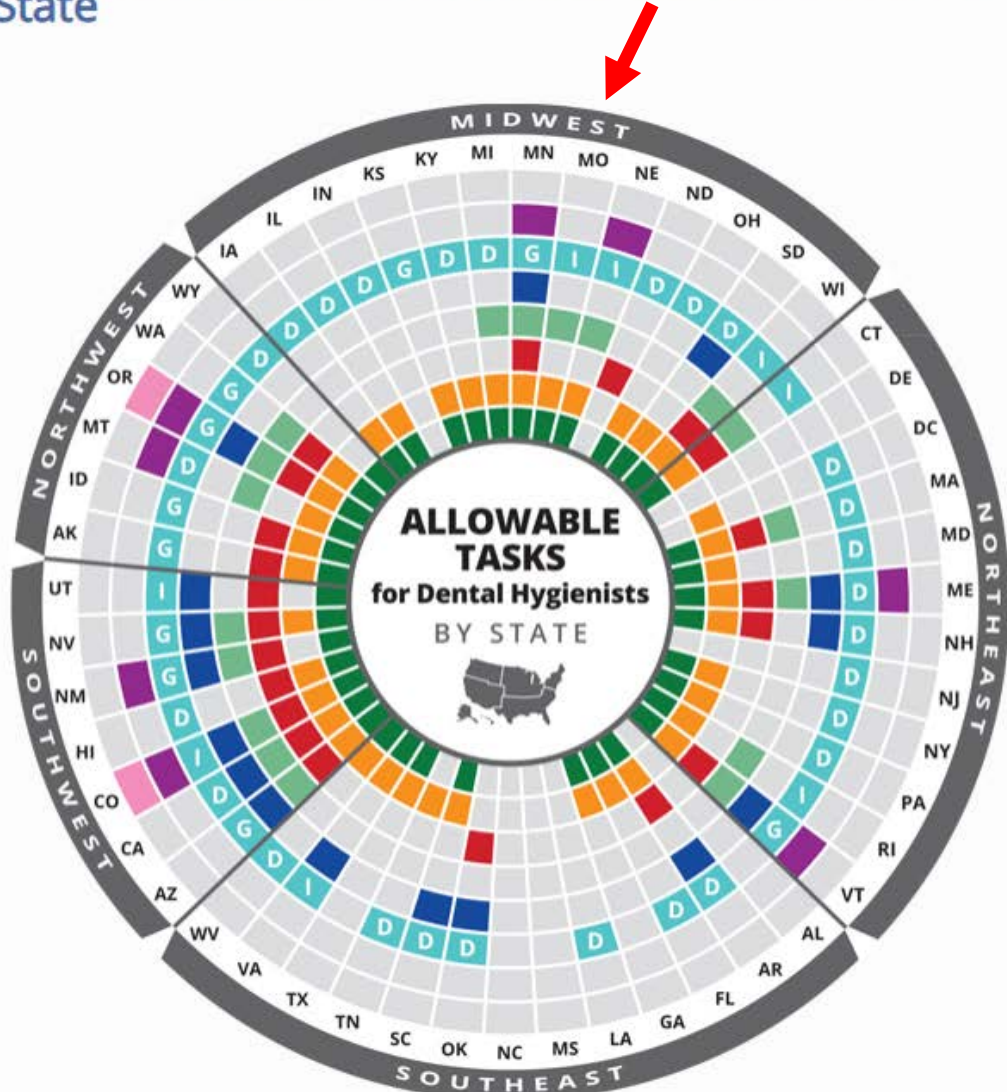


Let set 1-2 min. Patient is ready to go.

Polling Question!

- What material is your dental practice using for sealants?
 - Resin sealant
 - Glass ionomer sealant
 - Both, depending on the clinical situation

Variation in Dental Hygiene Scope of Practice by State



The purpose of this graphic is to help planners, policymakers, and others understand differences in legal scope of practice across states, particularly in public health settings.

Research has shown that a broader scope of practice for dental hygienists is positively and significantly associated with improved oral health outcomes in a state's population.^{1,2}

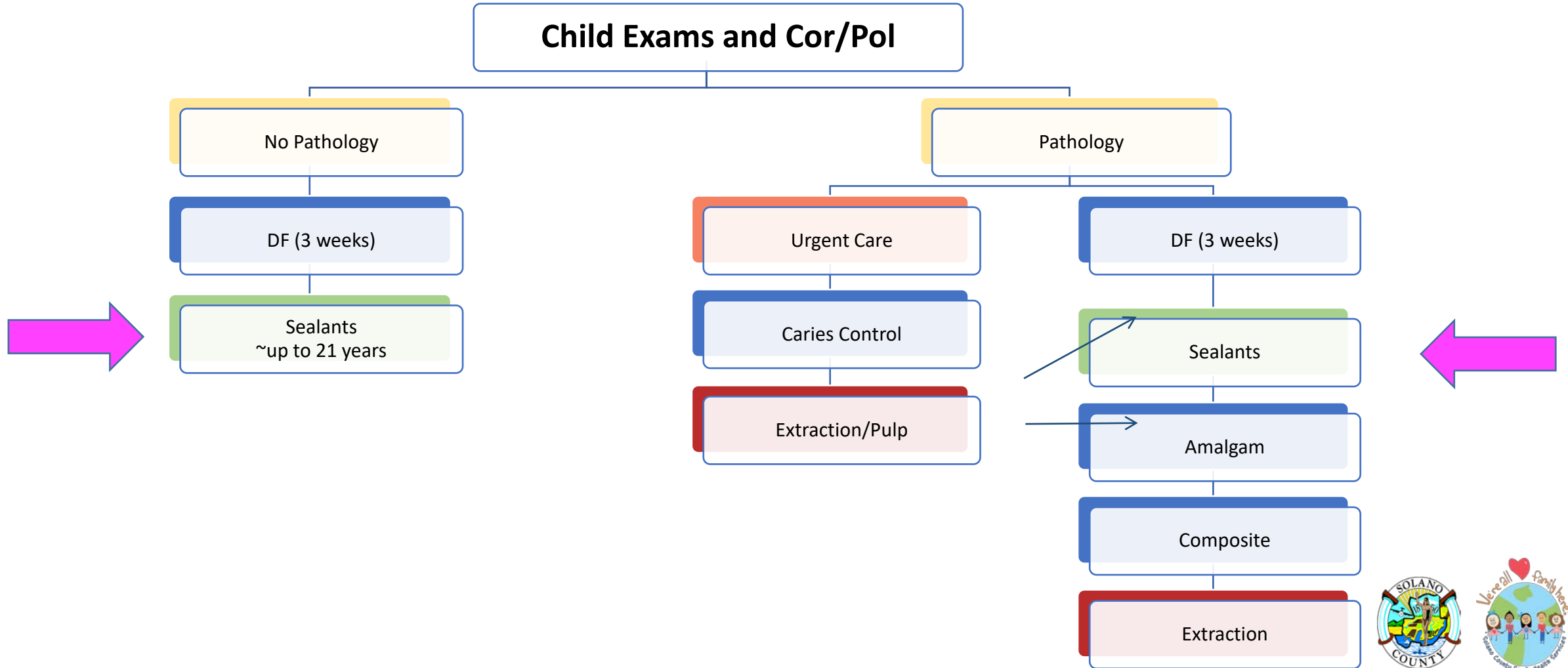
- Dental Hygiene Diagnosis
- Prescriptive Authority
- Local Anesthesia
 - D Direct
 - I Indirect
 - G General
- Supervision of Dental Assistants
- Direct Medicaid Reimbursement
- Dental Hygiene Treatment Planning
- Provision of Sealants
- Direct Access to Prophylaxis
- Not Allowed / No Law

Dental Assistants can place sealants in Missouri

Polling

- In my practice, the following team members place sealants
 - Only Registered Dental Hygienist
 - Only Dental Assistant
 - Both Registered Dental Hygienist and Dental Assistant

#3 Patient Protocols- Flow Charts for Sealants



#2 Sealant Placement > Routine Restorative

- First Visit: Exam, x-rays, P&F
- Second visit: LL
- Third visit: LR
- Fourth visit: LLA
- Fifth visit: Recall (six months have now passed!)
- Sixth visit: Seal Teeth #19, 30?
Oh wait, now they have cavities...



- Exam/First visit: Exam, x-rays
 - Self Management Goals
 - Seal Teeth #19, 30
 - SDF? P&F?
- Second visit:
 - Check SMGs
 - Extract Tooth #K, T?
- Third visit
 - Glass ionomer restoration # L & S or let exfoliate

#1 SAME DAY SEALANTS

Best Practices

- Daily morning huddle/EDR alerts to ID children 6-14
- Have sealant trays/curing light ready in every room
- Bring team to child not vice versa
- Policies ie. child w/o cavities must have sealants placed at exam
- Workflow for Same-Day sealants

Questions

Contact Us!



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