

Dental Practice-Based Research Network www. Dental PBRN.org

Study 1: Assessment of Caries Diagnosis and Caries Treatment



Completion Date

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SECTION 1: Questions 1- 8 have to do with methods that you may use to diagnose dental caries. Please circle the one number that best corresponds to your answer. Patients can vary substantially from one practice to the next, but we are interested in the patients in YOUR practice.

- 1. When you examine patients to determine if they have a caries lesion on a **proximal** (mesial or distal) surface, on a posterior tooth, on what percent of these patients do you use **radiographs** to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - **6** Every time or 100%
- 2. When you examine patients to determine if they have a caries lesion on the **occlusal** surface, on what percent of these patients do you use **radiographs** to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - **6** Every time or 100%
- 3. When you examine patients to determine if they have a **primary occlusal caries** lesion, on what percent of these patients do you use a **dental explorer** to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 Every time or 100%
- 4. When you examine patients to determine if they have a **caries** lesion **at the margin of an existing restoration** (recurrent/secondary caries) on what percent of these patients do you use a **dental explorer** to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - **6** Every time or 100%
- 5. When you examine patients to determine if they have a **primary caries** lesion on the **occlusal** surface, on what percent of these patients do you use **laser fluorescence** (for example, Diagnodent[®])?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 Every time or 100%



- 6. When you examine patients to determine if they have a **primary caries** lesion, on what percent of these patients do you use **air-drying** to help diagnose the lesion?
 - 1 Never or 0% [Skip to question 7]
 - **2** 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - 6 Every time or 100%

- 6b. Approximately how long do you dry the tooth surface?
 - 1 1-2 seconds
 - 2 3-4 seconds
 - 3 5 seconds
 - 4 More than 5 seconds
- 7. When you examine patients to determine if they have a **caries** lesion on a **proximal** (mesial or distal) surface of an anterior tooth, on what percent of these patients do you use **fiber optic** transillumination to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - **6** Every time or 100%
- 8. When you examine patients to determine if they have a **caries** lesion, on what percent of these patients do you use some sort of **magnification** to help diagnose the lesion?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 Every time or 100%

SECTION 2: Questions 9-22 have to do with methods that you may use to prevent or treat dental caries. Please circle the one number that best corresponds to your answer.

The first 6 questions refer to patients 6 to 18 years old. Please skip to question 15 if you do not see any patients 6-18 years old:

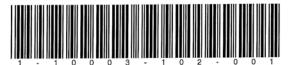
- 9. Of patients **6 to 18 years old**, for what percent do you apply **dental sealants** on the occlusal surfaces of at least one of their permanent teeth?
 - 1 Never or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - 5 75 to 99%
 - 6 Every time or 100%
- 10. Of patients **6 to 18 years old**, for what percent do you administer an **in-office fluoride application**, such as fluoride gel, fluoride varnish, or fluoride rinse?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - 5 75 to 99%
 - 6 All or 100%



- 11. Of patients 6 to 18 years old, for what percent do you recommend a non-prescription (over-the-counter) fluoride rinse?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 12. Of patients 6 to 18 years old, for what percent do you provide a prescription for some form of fluoride?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 13. Of patients **6 to 18 years old**, for what percent do you recommend an at-home regimen of **chlorhexidine rinse**?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - 5 75 to 99%
 - 6 All or 100%
- 14. Of patients 6 to 18 years old, for what percent do you recommend sugarless chewing gum or xylitol chewing gum?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%

The next 6 questions refer to patients who are more than 18 years old. Please skip to question 21 if you do not see any patients who are more than 18 years old:

- 15. Of patients **more than 18 years old** with at least one posterior tooth, for what percent do you apply **dental sealants** on the occlusal surface of at least one tooth?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%



- 16. Of patients **more than 18 years old** with at least one tooth, for what percent do you administer an **in-office fluoride application**, such as fluoride qel, fluoride varnish, or fluoride rinse?
 - **1** None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 17. Of patients **more than 18 years old** with at least one tooth, for what percent do you recommend a **non-prescription (over-the-counter) fluoride rinse**?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 18. Of patients **more than 18 years old** with at least one tooth, for what percent do you provide a **prescription for some form of fluoride**?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 19. Of patients **more than 18 years old** with at least one tooth, for what percent do you recommend an at-home regimen of **chlorhexidine rinse**?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 20. Of patients more than 18 years old with at least one tooth, for what percent do you recommend sugarless chewing gum or xylitol chewing gum?
 - 1 None or 0%
 - 2 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 21. Do you assess caries risk for individual patients in any way?
 - 1 Yes
 - **a.** I record the assessment on a special form that is kept in the patient chart. (Please include a copy of the form used when returning this questionnaire.)
 - **b.** I do not use a special form to make the assessment.
 - **2** No



SECTION 3: For questions 22-26, we are interested in what you believe are the most important factors when you design a treatment plan (including recall interval, interventions, and operative treatment). Please circle the number which best corresponds to your answer.

22. For patients **6 to 18 years old**, how important is each of the factors below when you decide on a treatment plan? Please circle the letter "o" at the bottom of the list if you do not see patients 6-18 years old.

		Not at all important	Slightly important	Moderately important	Very important	Extremely important
a.	Patient has one or more active caries lesions	1	2	3	4	5
b.	Patient has had caries recently	1	2	3	4	5
c.	Caries status of the parents	1	2	3	4	5
d.	Patient has several large restorations	1	2	3	4	5
e.	Current oral hygiene	1	2	3	4	5
f.	Presence of dental appliances	1	2	3	4	5
g.	Current use of fluorides by the patient	1	2	3	4	5
h.	Current diet of the patient	1	2	3	4	5
i.	Decreased salivary function	1	2	3	4	5
j.	Your own subjective assessment about the patient	1	2	3	4	5
k.	Patient's (or guardian's) understanding of caries progression	f 1	2	3	4	5
I.	Patient's (or guardian's) commitment to return for follow-up	1	2	3	4	5
m.	Patient's age	1	2	3	4	5
n. o.	Patient's socio-economic status Not applicable – I do not see any patients 6-18 years old	1	2	3	4	5



23. For patients **more than 18 years old**, how important is each of the factors below when you decide on a treatment plan? Please circle the letter "o" at the bottom of the list if you do not see patients 18 or older.

	·	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a.	Patient has an active caries lesion	1	2	3	4	5
b.	Patient has had caries recently	1	2	3	4	5
C.	Patient has several large restorations	1	2	3	4	5
d.	Current oral hygiene	1	2	3	4	5
e.	Presence of dental appliances	1	2	3	4	5
f.	Current use of fluorides by the patient	1	2	3	4	5
g.	Current diet of the patient	1	2	3	4	5
h.	Decreased salivary function	1	2	3	4	5
i.	Your own subjective assessment about the patient	1	2	3	4	5
j.	Patient's understanding of caries progression	1	2	3	4	5
k.	Patient's commitment to return for follow-up	1	2	3	4	5
I.	Patient's age	1	2	3	4	5
m.	Patient's socio-economic status	1	2	3	4	5
n.	Recession or root exposure	1	2	3	4	5
ο.	Not applicable – I do not see patients >18 y					

- 24. What percent of patients in your practice are interested in an individualized caries preventive regimen?
 - 1 None or 0%
 - **2** 1 to 24%
 - 3 25 to 49%
 - 4 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 25. For what percent of patients do you give individualized preventive treatment specifically for their needs?
 - 1 None or 0%
 - **2** 1 to 24%
 - 3 25 to 49%
 - **4** 50 to 74%
 - **5** 75 to 99%
 - 6 All or 100%
- 26. How strongly do you agree with this statement: "A dentist's assessment of caries risk for a patient can predict whether or not that patient develops new caries in the future"?
 - 1 Strongly disagree
 - 2 Somewhat disagree
 - 3 Neither agree nor disagree
 - 4 Somewhat agree
 - **5** Strongly agree



SECTION 4: Please use the following guide for the treatment codes used in <u>questions 27-29</u>. For each question, circle the letters which correspond to the treatment codes you would recommend for scenarios described. If treatment code "j" (other) is used, please specify. You may circle more than one treatment code per question.

		Question	Question	Question	
		27	28	29	
a.	No treatment today, follow the patient regularly	а	а	а	
b.	Instruct patient in plaque removal for the affected area	b	b	b	
C.	In-office fluoride	С	С	C	
d.	Prescription for fluoride	d	d	d	
e.	Recommend non-prescription fluoride	е	е	е	
f.	Use sealant or unfilled resin over tooth	f	f	f	
g.	Chlorhexidine treatment	g	g	g	
h.	Polish, re-surface, or repair restoration, but not replace	h	h	h	
i.	Replace entire restoration	i	i	i	
j.	Other treatment [please specify]	j	j	j	



For Questions 27-29: The patient is a 30-year old female with no relevant medical history. She has no complaints and is in your office today for a routine visit. She has been attending your practice on a regular basis for the past 6 years. **(Circle your answers above)**

27. The patient has 5 existing restorations and is not missing any teeth. Indicate what treatment you would provide to the restoration shown by the arrow in the first picture on the left.



28. Now imagine the patient has no other dental restorations than the one shown, no dental caries, and is not missing any teeth. Indicate what treatment you would provide to the restoration in the second picture on the left.



29. The same patient has no other dental restorations than the one shown, no dental caries, and is not missing any teeth. Indicate what treatment you would provide to the restoration in the third picture on the left.



SECTION 5: Please use the following guide for the treatment codes used in <u>questions 30-32</u>. For each question, circle the letters which correspond to the treatment codes you would recommend for each of the five cases. If treatment code "n" (other) is used, please specify. You may circle more than one treatment code per case.

- **a.** No treatment today, follow the patient regularly
- **b.** In-office fluoride
- **c.** Recommend non-prescription fluoride
- d. Prescription for fluoride
- **e.** Use sealant or unfilled resin over tooth
- f. Chlorhexidine treatment
- g. Minimal drilling and sealant

- **h.** Minimal drilling and preventive resin restoration
- i. Air abrasion and a sealant
- **j.** Air abrasion and preventive resin restoration
- **k.** Amalgam restoration
- I. Composite restoration
- m. Indirect restoration
- n. Other treatment [Please specify] _

For Questions 30 and 31: The patient is a 30 year old female with no relevant medical history. She has no complaints and is in your office today for a routine visit. She has been attending your practice on a regular basis for the past 6 years.

30. Indicate how you would treat the tooth shown if the patient has no other teeth with dental restorations or dental caries and is not missing any teeth.



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Case 1 Case 2 Case 3 Case 4 Case 5 a b c d e f g a b c d e f g a b c d e f g h i j k l m n h i j k l m n h i j k l m n

31. If the same patient has 12 teeth with existing dental restorations, heavy plaque and calculus, multiple Class V white spot lesions, and is missing five teeth.

Case 1 Case 2 Case 3 Case 4 Case 5 a b c d e f g a b c d e f g a b c d e f g h i j k l m n h i j k l m n h i j k l m n

32. Now suppose the patient is a 12-year old child with no relevant medical history. The patient is in your office today for the first time for a routine visit. She has 5 restorations and moderate plaque. A rubber dam cannot be used.

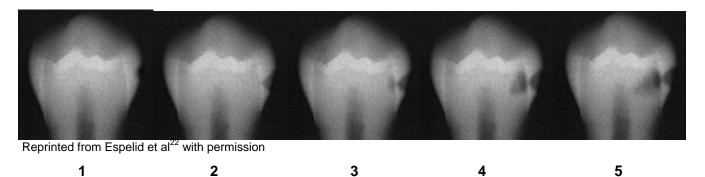
Case 1 Case 2 Case 3 Case 4 Case 5 abcdefg abcdefg abcdefg abcdefg hijklmn hijklmn hijklmn



SECTION 6: For questions 33 & 34, please circle the one number that corresponds to the lesion depth at which you think it is best to do a permanent restoration (composite, amalgam, etc.) instead of only doing preventive therapy?

For questions 33 and 34: The patient is a 30-year old female with no relevant medical history. She has no complaints and is in your office today for a routine visit. She has been attending your practice on a regular basis for the past 6 years.

33. The patient has no dental restorations, no dental caries, and is not missing any teeth.



34. The patient has 12 teeth with existing dental restorations, heavy plaque and calculus, multiple Class V white spot lesions, and is not missing any teeth. At what lesion depth do you think it would be best to do a permanent restoration instead of only doing preventive therapy?

