

**Selective *versus* non-Selective Caries Removal in Permanent Teeth
Questionnaire**

1. In a typical month, approximately how many adult patients (18+ years) do you treat who have at least one deep carious lesion in a posterior tooth, that extends into the inner 1/3 of the dentin such as the lesion in the radiograph below?

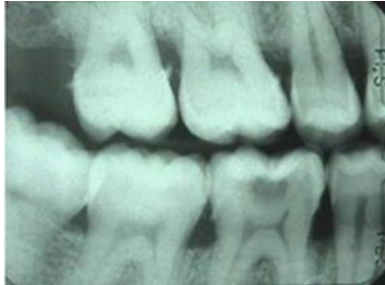


Number of adult patients:

<1, 1-2, 3-4, 5-6, 7+

[for practitioners responding <1, they will be deemed ineligible to continue with the remainder of the questionnaire and will not be compensated. They should be taken to a screen displaying this text: "Thank you for participating. However, you are not eligible for this study. Please consider participating in future national questionnaire studies conducted by the National Dental PBRN."]

The following three questions pertain to your current use of selective and non-selective (complete) caries removal in deep carious lesions extending to the inner 1/3 of dentin without an obvious potential pulpal exposure in permanent teeth, as shown in the radiograph below.



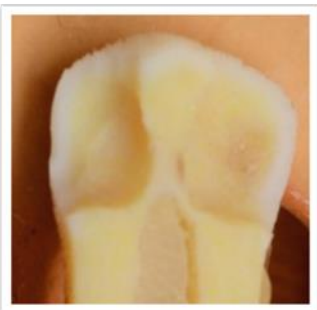
Please refer to the definitions and photos below for guidance when answering the following three questions.

Selective Caries Removal: The periphery of the cavity is cleaned to hard dentin, while pulpally as much carious tissue is removed while avoiding pulp exposure (leaving softened dentin if necessary) and removing enough tissue to place a durable restoration.

Non-Selective Caries Removal (also known as complete caries removal): Both at the periphery of the cavity and pulpally, all carious tissue is removed to reach hard dentin, leaving no softened dentin.



Selective Caries Removal



Non-Selective (Complete) Caries Removal

2. In a patient with **symptomatic (mild reversible pulpitis)** deep occlusal and/or proximal caries in a posterior tooth where the caries radiographically appears to extend to the inner 1/3 of dentin without an obvious potential pulpal exposure, what percentage of the time do you: (Percentages must add to 100%)

Option 1: Remove all caries at the periphery of the cavity; remove as much caries as possible pulpally and stop before the pulp is exposed

Option 2: Remove all caries and proceed with a direct pulp cap if the pulp is exposed

Option 3: Remove all caries and proceed with endodontic-related procedures if the pulp is exposed

3. In a patient with **asymptomatic** deep occlusal and/or proximal caries in a posterior tooth where the caries radiographically appears to extend to the inner 1/3 of dentin without an obvious potential pulpal exposure, what percentage of the time do you: (Percentages must add to 100%)

Option 1: Remove all caries at the periphery of the cavity; remove as much caries as possible pulpally and stop before the pulp is exposed

Option 2: Remove all caries and proceed with a direct pulp cap if the pulp is exposed

Option 3: Remove all caries and proceed with endodontic-related procedures if the pulp is exposed

4. On a scale of 1-5 (with 1 being 'not at all important' and 5 being 'extremely important'), how important are each of the following factors when you make clinical decisions about the management of deep carious lesions extending to the inner 1/3 of dentin in posterior permanent teeth (adults 18+ years)?

	Not at all important				Extremely important	Prefer not to answer
Duration of total treatment, including caries management and restorative needs	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Further restoration needs of the tooth after caries management	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Financial considerations i.e. total cost to restore the tooth to form and function	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Patient's age	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Patient's treatment preferences	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Patient's general health	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Patient's oral health, including anticipated compliance with future appointments	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9

The National Dental PBRN is considering conducting a randomized clinical trial regarding the effectiveness of selective *versus* non-selective (complete) caries removal for deep carious lesions extending to the inner 1/3 of dentin in permanent teeth (adults 18+).

- Randomization is the process of assigning study participants to different treatment arms, and the assignments are made by the research study team.
 - This randomization can be at the individual patient level, in which the selective or non-selective (complete) caries removal technique for each participating patient within an office will be determined by the research study team.
 - Randomization could also occur at the practitioner/office level (called cluster randomization), in which all participating patients in an office will receive either selective or non-selective (complete) caries removal, determined by the research study team.

The following questions pertain to your willingness and ability to participate in this type of trial and your opinions about outcome measures that should be recorded in such a clinical trial.

5. How willing would you be to participate in the following:

	Very Unwilling	Somewhat Unwilling	Neither Unwilling or Willing	Somewhat Willing	Very Willing	Prefer not to answer
In a cluster randomized trial where all trial patients in your office would be assigned to receive selective caries removal OR non-selective (complete) caries removal						
In an individual patient randomized trial where some trial patients would be assigned to receive selective caries removal and others would be assigned to non-						

selective (complete) caries removal						
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[If Participants answer “very unwilling” or “somewhat unwilling” to either of the above present 5a below – otherwise skip 5a]

5a. Which of the following best describes why you are very or somewhat unwilling to participate in either a cluster randomized or individual patient randomized trial?

- I prefer to retain the decision-making regarding treatment options for my patients.
- I prefer to use selective caries removal in deciduous teeth only.
- Selective caries removal can result in radiolucencies on subsequent radiographs, and therefore can be hard to interpret.
- More research is needed to show that selective caries removal results in better clinical outcomes such as sustained tooth vitality.
- Prefer not to answer
- Other _____

6. On a scale of 1-5 (with 1 being 'not at all important' and 5 being 'extremely important'), how important do you think it is to record the following clinical outcomes during the randomized clinical trial of selective *versus* non-selective (complete) caries removal?

	Not at all important				Very important	Prefer not to answer
Sustained tooth vitality	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Pulp exposure during caries removal	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Progression of caries	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Need for additional treatment on the tooth, such as re-restoration	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9

7. On a scale of 1-5 (with 1 being 'not at all important' and 5 being 'extremely important'), how important do you think it is to record the following patient centered outcomes during the randomized clinical trial of selective *versus* non-selective (complete) caries removal?

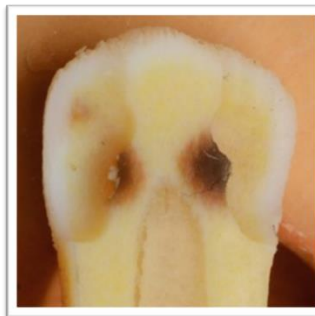
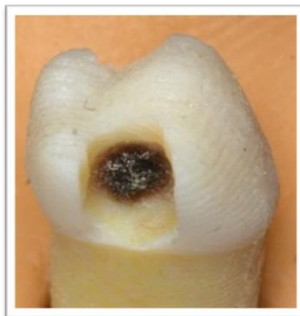
	Not at all important				Very important	Prefer not to answer
Occurrence/persistence of symptoms/sensitivity	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Need for further pain relief	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Oral health-related quality of life e.g. comfort when eating, satisfaction with their oral health	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9
Satisfaction with dental care	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 9

8. If there are any other outcomes you think should be recorded in this clinical trial, please provide your suggestions in the text box provided. _____

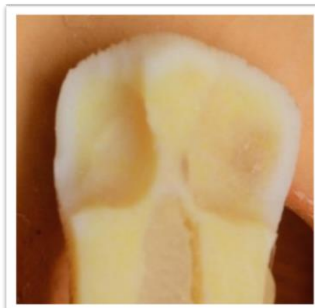
Using 3-dimensional printing technology, it is possible to manufacture plastic teeth that contain simulated layers of enamel, dentin, pulp, and dental caries. The photos below depict 3-D printed intact teeth and others that have been prepared with selective or non-selective (complete) caries removal techniques.



Unprepared 3-D printed tooth



Selective Caries Removal



Non-Selective (Complete) Caries Removal

9. As part of the training process for the proposed randomized clinical trial, how willing would you be to prepare 3-D printed teeth according to selective and non-selective (complete) caries removal techniques at your office and send them to the research study team for evaluation? You would be compensated for your time to engage in this activity.

- Very unwilling
- Somewhat unwilling
- Neither unwilling or willing
- Somewhat willing
- Very willing
- Prefer not to answer

10. Patients enrolled in this randomized clinical trial will require intra-oral photographs of prepared posterior teeth using an intra-oral camera or an intra-oral scanner. Do you have the capability and willingness to take such images for the proposed clinical trial?

Yes

No

Prefer not to answer

[Standard Network Remuneration section]

1. [If EQ indicates practitioner is part of group practice ask] **Are you employed at [INSERT NAME OF GROUP PRACTICE]?**

Yes

No

[If 1 = "Yes"] END [INSERT END OF SURVEY LANGUAGE: Thank you so much for participating in this National Dental PBRN study!]

2. [If practitioner does not indicate they are part of a group practice on the EQ or 1 = "No"] **To help us determine if you are eligible for individual compensation for your participation in this questionnaire, are you employed in any of the following dental firms? If so, please check your organization (please select one).**

Health Partners

Park Dental

Permanente Dental Associates

Veterans Affairs Dental Services

I am not employed by any of the above.

[If 2 =/= "I am not employed by any of the above."] END [INSERT END OF SURVEY LANGUAGE: Thank you so much for participating in this National Dental PBRN study!]

3. [If 2 = "I am not employed by any of the above."] **Do you want to be compensated for your participation?**

Yes

No

[If 3 = "No"] END [INSERT END OF SURVEY LANGUAGE: Thank you so much for participating in this National Dental PBRN study!]

[Programmer Instructions: [If 3 = "Yes"] Display the following information in a non-editable format. The information should be derived from the Practitioner Load Form. If there is no address information

available from the Practitioner Load Form, proceed to question 5 to display the fields for the practitioner to enter their information.]

4. [If 3 = "Yes" and address information is available from Practitioner Contact Form] **Below is your Network enrollment information. For you to receive payment, we need to know if you would like to receive payment using the address, name, and phone number listed below or if you would like to provide updated information. Please review the information below and indicate your preference.**

- i) **First name**
Middle name or initial, if available
Last name

- I would like to receive payment using this information.
 I would like to receive payment for this questionnaire under a different name.

ii) **Mailing address**

- I would like to receive payment using this information.
 I would like to receive payment for this questionnaire at a different address.

iii) **Primary Phone number**

- I would like to receive payment using this information.
 I would like to receive payment for this questionnaire using a different phone number.

[If 4.i, 4.ii, and 4.iii = "I would like to receive payment using this information"] END **[INSERT END OF SURVEY LANGUAGE: Thank you so much for participating in this National Dental PBRN study!]**

5. [If 4.i = "I would like to receive payment for this questionnaire under a different name"] **Please provide the name under which you would like to receive payment.**

First name

Middle name or initial

Last name

6. [If no address information is available from Practitioner Contact Form or 4.ii = "I would like to receive payment for this questionnaire at a different address"] **Please provide the address information you would like to use for payment.**

Address line 1

Address line 2 [optional]

City

State

ZIP code

7. [If 4.iii = "I would like to receive payment for this questionnaire using a different phone number."] **Please provide the phone number you would like to use for payment.**

Primary Phone number

8. [If 4.i, 4.ii, and 4.111 =/= "I would like to receive payment using this information." and 5, 6, or =/= Null] **Do you want to update your Network information on file with the contact information you have provided?**

Yes, please update my enrollment information.

No, I do not wish to update my enrollment information at this time.

END [INSERT END OF SURVEY LANGUAGE: Thank you so much for participating in this National Dental PBRN study!]