

**Appendix Table 1. Multivariable regressions of change score for each of the six clinical scenarios**

<b>Covariate</b>	<b>Scenario 1</b>	<b>Scenario 2</b>	<b>Scenario 3</b>	<b>Scenario 4</b>	<b>Scenario 5</b>	<b>Scenario 6</b>
<i>Type III sum of square value for...</i>						
Baseline response	53.4	49.9	42.3	35.8	24.1	21.9
Level of participation	4.1	2.9	1.0	2.0	1.5	3.0
<i>F value for ...</i>						
Baseline response	104.1	91.3	83.5	55.5	34.9	22.6
Level of participation	16.1	10.4	3.8	6.1	4.2	12.4
<i>P-value for...</i>						
Baseline response	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Level of participation	<0.001	0.001	0.053	0.014	0.041	0.001
Sample size	397	388	382	377	362	383
R-squared value for the overall regression	0.35	0.32	0.31	0.23	0.16	0.20
F-value for the overall regression	69.6	61.4	57.2	37.1	23.4	18.6
P-value for the overall regression	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

The GLM procedure in SAS was used for each of these regressions. The Type III sum of squares value was used.

Scenario numbers correspond to the scenario numbering used in Tables 2-4 in the manuscript.

Scenario 1: Defective composite restoration with cementum-dentin margins

Scenario 2: Defective composite restoration with enamel margins

Scenario 3: Defective amalgam restoration

Scenario 4: Occlusal caries scenario 1

Scenario 5: Occlusal caries scenario 2

Scenario 6: Proximal caries scenario