

Supplementary Appendix Table S1 CDT codes (code on dental procedures and nomenclature) used to generate the study data consisting of posterior composite restorations and root canal treatments

Treatment type	CDT codes	Procedure description
Posterior composite restorations	2385	Resin one surface, posterior permanent
	2386	Resin two surface, posterior permanent
	2387	Resin three surfaces, posterior permanent
	2388	Resin four or more surface, posterior permanent
	2391	Resin-based composite, one surface posterior
	2392	Resin-based composite, two surfaces posterior
	2393	Resin-based composite, three surfaces posterior
Root canal treatments	2394	Resin-based composite, four or more surface posterior
	3310	Root canal therapy: anterior
	3320	Root canal therapy: bicuspid
	3330	Root canal therapy: molar

Supplementary Appendix Table S2 Showing incorrect instances of a tooth number field and their frequencies for PCR

Incorrect tooth number field	Frequency
Missing tooth number	26
A	8,532
B	6,088
C	183
D	57
E	97
F	91
G	56
H	194
I	5,989
J	8,295
K	8,472
L	6,704
M	127
N	4
O	17
P	6
Q	6
R	128

(Continued)

Supplementary Appendix Table S2 (Continued)

Incorrect tooth number field	Frequency
S	6,851
T	8,539
FM	1
LA	3
33	2,492
34	1,609
35	26
36	2
37	3
38	6
39	4
40	27
41	1,530
42	2,480
43	2,635
44	1,584
45	23
47	3
48	1
49	3
50	14
51	1,654
52	2,664
67	2
Total	77,228

Abbreviation: PCR, posterior composite restorations.

Supplementary Appendix Table S3 Incorrect tooth numbers for RCT

Tooth numbers	Frequency
Missing tooth number	284
B	1
E	1
F	1
K	1
O	1
T	1
33	1
34	1
36	1
42	3
43	2
44	1
51	3
52	4
0–11	3
0–13	1
0–20	3
0–22	1
0–24	2
0–29	1
0–7	2
0–8	3
0–9	2
Total	324

Abbreviation: RCT, root canal treatment.

Supplementary Appendix Table S5 Variations of PCR and RCT CDT codes which were found and excluded in the data by the number of observations and patients

PCR codes		
CDT codes	Observations/Rows	Number of patients
2385C	9	8
2386C	9	7
2387C	3	3
2391A	44	34
2391B	418	237
2392A	7	5
2392B	233	177
RCT codes		
CDT codes	Observations/Rows	Number of patients
3310D	4	4
3320D	18	15
3330d	53	49

Abbreviations: CDT, code on dental procedures and nomenclature; PCR, posterior composite restorations; RCT, root canal treatment.

Supplementary Appendix Table S4 Original and revised documentation of root canal treatment (RCT) after correcting the procedure codes according to tooth type

RCT codes	Tooth type				
	Incisor	Canine	Premolar	Molar	Total
Original documentation of RCT					
Anterior RCT (3310)	9,570	4,575	488	84	14,717
Bicuspid RCT (3320)	67	81	23,465	70	23,683
Molar RCT (3330)	11	5	143	34,043	34,202
Total	9,648	4,661	24,096	34,197	72,602
Revised documentation of RCT					
Anterior RCT (3310)	9,648	4,661	0	0	14,309
Bicuspid RCT (3320)	0	0	24,096	0	24,096
Molar RCT (3330)	0	0	0	34,197	34,197
Total	9,648	4,661	24,096	34,197	72,602

Supplementary Appendix Table S6 Number of patients who received one or more posterior composite restorations (PCR) and/or root canal treatment (RCT)

Patients who received PCR			
Age in years	Gender		Total (%)
	Female (%)	Male (%)	
Less than 18	20,535 (21.2)	18,484 (24.8)	39,019 (22.8)
18–44	46,713 (48.3)	33,040 (44.3)	79,753 (46.6)
45–64	22,506 (23.3)	17,447 (23.4)	39,953 (23.3)
65 or older	6,894 (7.1)	5,568 (7.5)	12,462 (7.3)
Total	96,648 (100.0)	74,539 (100.0)	171,187 (100.0)
Patients who received RCT			
Less than 18	288 (3.7)	279 (4.1)	567 (3.9)
18–44	3,782 (48.4)	3,220 (47.0)	7,002 (47.7)
45–64	2,883 (36.9)	2,521 (36.8)	5,404 (36.8)
65 or older	865 (11.1)	837 (12.2)	1,702 (11.6)
Total	7,818 (100.0)	6,857 (100.0)	14,675 (100.0)
Patients who received both PCR and RCT			
Less than 18	1,072 (6.0)	1,001 (7.1)	2,073 (6.5)
18–44	8,207 (45.6)	5,509 (39.3)	13,716 (42.8)
45–64	6,951 (38.6)	5,746 (41.0)	12,697 (39.6)
65 or older	1,771 (9.8)	1,768 (12.6)	3,539 (11.1)
Total	18,001 (100.0)	14,024 (100.0)	32,025 (100.0)
Sum total	122,467 (56.20)	95,420 (43.80)	217,887(100.0)

Supplementary Appendix Table S7 Frequency of PCR and RCT procedures by tooth and arch

Procedures	Tooth type	Maxillary	Mandibular	Total
Root canal treatment	Anterior	10,721 (75.82)	3,419 (24.18)	14,140 (19.84)
	Bicuspid	14,077 (59.38)	9,630 (40.62)	23,707 (33.27)
	Molar	14,318 (42.85)	19,093 (57.15)	33,411 (46.89)
	Total	39,116 (54.89)	32,142 (45.11)	71,258 (100)
Posterior composite restoration	Premolar	153,152 (54.83)	126,161 (45.17)	279,313 (33.69)
	Molar	264,599 (48.13)	285,205 (51.87)	549,804 (66.31)
	Total	417,751 (50.39)	411,366 (49.61)	829,117 (100)

Abbreviations: PCR, posterior composite restorations; RCT, root canal treatment.