Analysis of patient participation

Patient compliance in completing and returning the study surveys.
Network dentists returned completed restorative data forms for 7,286 patients enrolled in this study. The network Regional Coordinators received a total of 5,879 surveys from these patients. This resulted in a compliance rate of 81%. Descriptive statistics for patient, dentist, and restoration factors for patients who did and did not return the satisfaction survey are presented in Table 1. Multivariate regression coefficients for patient, dentist, and restoration factors associated with having returned the study surveys are presented in Table 2. Patients who returned their satisfaction survey were more likely to be older (p < .001); female (p = 001); White compared to Black (p < .001); American Indian/Alaskan Native (p < .001); Asian (p .002); and have dental insurance (p = .033). Dentists whose patients returned their satisfaction survey were more likely to have placed the original restoration (p = .005) and to be in a solo small group practice (p < .001). The surveys were more likely to be returned when the tooth was not a pre-molar/anterior compared to a molar (p < .001). Also, fewer number of restorations performed at the visit was associated with a greater likelihood of survey return (p .024). No differences were found for patient's ethnicity, dentist's gender, years since dental school graduation, percent of time spent on non-implant restorative procedures, whether the procedure was a repair or a replacement, and original restoration material.

Patients who answered all survey items.
Of the 5,879 patients who returned the study survey, 92% (n = 5,405) had completed all of the survey items. Patients who completed all items were younger (OR = 0.99, p < .001; mean 52.3 years, SD = 15.4) than non-completers (mean = 58.6 years, SD = 15.6) and more likely to have been seen in a Public Health Practice (13%) compared to Solo or Small Group Practice (8%) or Large Group Practice (7%). No differences were found for patient's gender, race, ethnicity, having dental insurance, dentist's gender, years since dental school graduation, percent of time spent on non-implant restorative procedures, whether the dentist placed the original restoration, whether the procedure was a repair or a replacement, tooth involved, and the original restoration material.

Table 2. Dentist, patient, and restoration characteristics associated with satisfaction surveys which were returned.

Predictor variable (reference)	B (SE)	OR (95% CI)	p. value
Patient characteristics			
Age in years	-.027 (.048)	0.97 (0.97-0.98)	<.001
Patient gender (male)	.258 (.062)	1.29 (1.15-1.46)	<.001
Black (White)	-.761 (.113)	0.47 (0.38-0.58)	<.001
American Indian – Alaskan Native	-1.425 (.291)	0.24 (0.14-0.43)	<.001
Asian	-.697 (.229)	0.50 (0.32-0.78)	.002
Other	-.505 (.722)	0.60 (0.15-2.48)	n.s.
Dental insurance (yes)	-.182 (.085)	0.83 (0.71-0.98)	.033
Dentist characteristics			
LGP (SGP)*	-.345 (.072)	0.71 (0.62-.082)	<.001
PHP (SGP)*	.306 (.162)	1.36 (0.99-1.87)	.052
Restoration factors			
Dentist placed existing restoration (no)	-.048 (.071)	0.81 (0.70-0.94)	.005
Number of restorations treated	106 (.047)	1.11 (1.02-1.22)	.024
Tooth – molar (premolar/anterior)	-.129 (.067)	1.07 (0.94-1.22)	<.001

a) The dependent variable was coded 0=survey not returned, 1=survey was returned.

b) General estimating equations were used to adjust for restorations clustered within dentists and patients. Backwards deletion was used with .15 used as the removal criteria. The model also included, patient ethnicity, dentist gender, years since dental school graduation, percent of time spent on non-implant restorative procedures, whether the procedure was a repair or a replacement, and original restoration material.

*Solo or Small group practice=SGP, Large group practice=LGP, Public health practice=PHP.

<u>Table 1. Descriptive statistics for patient, dentist and procedure factors for patients who did and did not return the satisfaction survey</u>

Variable	Did not return survey Mean (SD) or % (n)	Returned survey Mean (SD) or % (n)
Dentists characteristics	n=1407 patients	n=5879 patients
Gender		
Male	20% (n=1054)	80% (n=4185)
Female	22% (n=481)	78% (n=1694)
Years since dental school graduation	21.3 (SD=10.5)	22.4 (SD=10.5)
Percent of time spent on non-implant restorations	56% (SD=20)	56% (SD=19)
Practice model used by dentist		
SGP	18% (n=783)	81% (n=3542)
LGP	25% (n=693)	75% (n=2037)
PHP	16% (n=59)	84% (n=300)
Practices by region		
Alabama/Mississippi	22% (n=349)	78% (n=1215)
Florida/Georgia	20% (n=335)	80% (n=1348)
Permanente Dental Associates	25% (n=343)	75% (n=1026)
HealthPartners and practitioners in Minnesota	26% (n=376)	74% (n=1091)
Scandinavia (Denmark, Norway, Sweden)	19% (n=38)	90% (n=1199)
Patients characteristics		
Patient age	46.1 (SD=16.9)	52.8 (SD=15.6)
Patient gender (missing=16)		
Male	23% (n=736)	77% (n=2431)
Female	19% (n=795)	81% (n=3436)
Patient race (missing=73)		
White	19% (n=1249)	81% (n=5324)
Black or African-American	32% (n=146)	68% (n=304)
Asian	31% (n=118)	69% (n=262)
American Indian or Alaskan Native	42% (n=23)	58% (n=32)
Native Hawaiian or Other Pacific Islander	39% (n=24)	61% (n=37)

Other	26% (n=14)	74% (n=40)
Patient Hispanic/Latino ethnicity (missing=137)		
Hispanic/Latino	24% (n=308)	76% (n=981)
Not Hispanic/Latino	20% (n=1188)	80% (n=4800)
Patient was seen in a given practice model		
SGP	18% (n=783)	82% (n=3542)
LGP	25% (n=693)	75% (n=2037)
PHP	16% (n=59)	84% (n=300)
Number of restorations that the patient had during the visit		
Single restoration	20% (n=1142)	80% (n=4494)
Two restorations	21% (n=282)	79% (n=1040)
Three restorations	24% (n=79)	76% (n=253)
Four restorations	26% (n=32)	74% (n=92)
Percent of patients who have dental insurance (missing=5)	16% (n=248)	23% (n=1322)

*Small group practice=SGP, Large group practice=LGP, Public health practice=PHP.