



**Abstract for AADR Annual Meeting
Los Angeles, CA, March 16-19, 2016**

External Factors Impact Likelihood to Recommend Crowns Among National-Dental-PBRN Dentists

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Objectives: Clinicians frequently recommend that teeth receive single-unit crowns. Objectives were to: (1) quantify practitioner variation in propensity to recommend a crown; and (2) test whether certain dentist, practice, and clinical factors are significantly associated with this propensity.

Methods: National Dental Practice-Based Research Network clinicians (www.NationalDentalPBRN.org) completed a questionnaire about indications and techniques for making single-unit crowns. Four clinical scenarios were provided to clinicians, who ranked their likelihood of recommending a single-unit crown on a 4-point ordinal scale. These responses were used to calculate a "Crown Factor" (CF; range 0-12) for each dentist. A higher score implies that a clinician is more likely to recommend a crown. Other responses on this questionnaire and from the network's Enrollment Questionnaire were tested to determine whether they were significantly ($p < 0.05$) associated with the Crown Factor. These were questions relating to practice type, years in practice, perceived practice busyness, and insurance coverage of patients. Associations were tested using chi-square tests and multiple regression analysis.

Results: 1847 of 2299 invited dentists participated so far (80%). This abstract reports only on the first 1000 respondents. Dentists practicing less than 5 years were less likely to recommend crowns (lower CF). Private practice owners had a higher CF (6.8 ± 1.8) than Health Partners Dental Group clinicians (4.54 ± 1.65) and dental school clinicians (5.2 ± 1.9). CF also varied significantly by perceived practice busyness, insurance coverage, and network region. Respondents who reported in-office milling as their primary mode of making single-unit crowns (9.9%) had a higher CF (7.3 ± 1.9) vs. clinicians using a commercial lab (6.5 ± 1.8).

Conclusions: There is substantial variation in the likelihood of recommending a crown (CF) among network clinicians. This CF may be associated with identifiable external factors, as well as the patient's clinical presentation. Support: U19-DE-22516.

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Dentist Material Selection for Single-Unit Crowns: Findings from the National-Dental-PBRN

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Objectives: (1) quantify dentists' recommendations for single-unit crown materials; (2) test the hypothesis that dentist/practice characteristics are significantly associated with these recommendations.

Methods: Dentists enrolled in the National Dental Practice-Based Research Network (NationalDentalPBRN.org) completed a questionnaire about techniques and materials used for single-unit crowns, and an enrollment questionnaire about dentist/practice characteristics. Respondents were asked what material they would use for a single-unit crown on tooth #19 (posterior) and #8 (anterior) on a 40-year male who attends recall visits regularly, has no relevant medical history, has low caries risk, has satisfactory occlusion with minimal wear, and is financially able to pay for a crown out-of-pocket. Material choices included: full metal, porcelain-fused-to-metal (PFM), all-zirconia, layered zirconia, lithium disilicate, leucite-reinforced ceramic, or other. Practitioner characteristics included: gender, race, years since graduation, practice type, region, practice busyness, insurance coverage, hours work/week, practice location, and specialty type.

Results: A total of 1,847 of 2,299 invited dentists participated so far (80%); this abstract reports only on the first 1,000 respondents. The top 3 choices for posterior crowns were all-zirconia (31%), PFM (30%) and lithium disilicate (20%). There were significant differences ($p < 0.05$) by: gender, race, practice type, region, practice busyness, insurance coverage, and hours work/week.

The top 3 choices for anterior crowns were lithium disilicate (55%), layered zirconia (17%), and leucite-reinforced glass ceramic (12%). There were significant differences ($p < 0.05$) by: race, hours work/week, and practice location.

Conclusion: Network dentists use a broad range of materials for single-unit crowns for anterior and posterior teeth, adopting newer materials into their practice routine as they become widely available. Material choices are significantly associated with dentist/practice characteristics. Support: U19-DE-22516.

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