

Summary of research project ideas provided by Dental PBRN dentists who attended orientation sessions

Diagnostic and preventive topics

Effectiveness of different diagnostic methods for dental caries detection

Differential effectiveness of at-home fluoride rinse vs. prescription fluoride methods for patients at high risk for dental caries

Whether intake of sugar-containing soft drinks is associated with dental caries incidence in private practice patients

Incidence of dental erosion due to gastro-esophageal reflux disease and its effect on dental materials

Effectiveness of different methods to prevent root caries Validity of the AAPD caries risk assessment tool (CAT) and other caries risk assessment techniques

Restorative dentistry topics

Incidence of dental caries developing under dental sealants

Effectiveness of caries prevention and incidence of material failure of dental sealants

Effectiveness of early restorative intervention vs. 'watchful waiting' approach to dental caries

Incidence of pulp damage due to dental preparation for full-coverage crowns

Effectiveness of a 'replace entire restoration' as compared to 'repair restoration' approach for treatment of restorations with secondary caries

Effectiveness of methods to treat dental sensitivity

Longevity of full-porcelain vs. porcelain-fused-to-metal crowns

Longevity of amalgam restorations as compared to composite restorations

Longevity of posterior composite restorations

Effectiveness of computerized vs. natural eye color matching methods

Incidence of root fractures following root canal treatment

Longevity of dental abutment teeth that are restored with conventional removable prosthodontics as compared to precision attachment removable prosthodontics

Longevity of amalgam as compared to composite build-ups in preparation for full-crown coverage

Identifying filling materials and restorative approaches that are least associated with post-operative dental sensitivity

Incidence of dental sensitivity due to various dental bleaching methods

Longevity of dental composites placed when using a rubber dam as compared to not using a rubber dam

Effectiveness of cast post-and-core systems as compared to fiber post systems

Relationship between diameter of post and incidence of root fracture

Longevity of/failure rates of different post-and-core materials Comparison of failure/success of various restorative materials/methods

for primary teeth (SSC, amalgam, resin, GIC...)

Comparison of methods for pediatric dentists vs general dentists (also look at actual differences in the groups for methods used)

Endodontic topics

Differential effectiveness of single-appointment as compared to multiple-appointment root canal treatment

Effectiveness of different obturation methods for root canal therapy

Effectiveness of different methods for endodontic irrigation