

Summary of research project ideas provided by the first 1,056 Dental PBRN dentists on question 27 of the enrollment questionnaire

40% of respondents provided at least one idea for a research project or research area

general restorative dentistry issues (n = 190)

long-term effectiveness of dental adhesive and bonding usage in private practice
effectiveness of CAD-CAM and CEREC restorations in different clinical situations
relative effectiveness of different dental laser treatments
failure rate and other aspects of long-term effectiveness of root canal treatment
differences in long-term failure rates of endodontic treatment based on pre-treatment dental clinical status of patient
differences in long-term failure rates of endodontic treatment based on pre-treatment systemic health status of patient
long-term failure rate of full crown restorations
failure rates of dental implants placed outside of teaching institutions
comparative effectiveness of different implant systems
effectiveness of oral sedation versus use of nitrous oxide
differences in effectiveness of porcelain vs. acrylic denture teeth
optimum post design to prevent roots from fracturing
effectiveness of traditional vs. rotary endodontic techniques
effectiveness of methods to prevent and treat tooth sensitivity

preventive dentistry issues (n = 137)

caries incidence rates across all age groups among patients seen in private practice
most effective methods to prevent root caries in older adults among patients seen in private practice
effectiveness of fluoride varnishes on preventing caries
% of dental patients regularly receiving oral soft tissue examinations and its implications on cancer detection rates
why some patients choose dental extraction over preventive dentistry
how to best motivate patients to improve oral care at home
prevention of early childhood caries
effect of vitamins and supplements on oral health
benefits of re-mineralization strategies to treat incipient carious lesions vs. early restorative intervention
effectiveness of sealants among different patient types
effectiveness of different sealant materials on preventing dental caries
optimum methods to encourage tobacco cessation in patients
optimum and most cost-effective methods to improve patient preventive awareness and 'dental IQ'
effect of increased soft drink consumption on caries and dental erosion among dental patients
effectiveness of dental care on overall on patients' quality of life
optimum case presentation and communication techniques with patients

demand for dental care and access to care issues (n = 128)

dentists/population and dental manpower projections
% children seeking dental care
access to care for low-income population
comfort level of general dentists performing specialty procedures
% of dentists doing free or 'charity' care
how the insurance industry affects the standard of care and quality of care
optimum means to deliver care in nursing homes
how to make organized dentistry more effective in promoting and protecting dental practice
trends in expansion of the role of dental practice into other health care arenas

business aspects of dental practice and efficiency of practice issues (n = 70)

prevalence of insured vs. uninsured patients among patients in private practice
effects of managed care vs. fee-for-service on services delivered
effect of practice income on whether dentist accepts 3rd party payments
yearly maximum per patient allowed by insurance companies has changed very little in the past decades; methods to influence this
how large is the shortage of dental auxiliaries?
prevalence of referral patterns to specialists by general dentists
educational and compensation issues for dental hygienists

periodontal conditions (n = 54)

effectiveness of bone grafting and periodontal re-attachment techniques
effects of crowns and veneers on periodontal condition
effectiveness of aloe vera and other medicaments in treating or preventing postoperative osteitis
methods to improve wound healing
effect of restorative dentistry methods on periodontal condition

amalgams and composites (n = 53)

prevalence of amalgam and composite usage in private practice
differences in longevity and tooth fracture rates associated with amalgam vs. composite restorations
safety of mercury in amalgam
which amalgam and composite materials have the best effectiveness and longevity
prevalence of usage of composites in primary teeth by dentists in private practice

safety of dental office (n = 19)

incidence of problems due to water line sepsis
prevalence of infection control procedures in private practice and infection rates due to dental procedures
prevalence of substance abuse among dentists
prevalence of quackery in dentistry and unethical treatment
safety of various sedation techniques in private practice
safety of dental laser treatments

diagnostic methods (n = 17)

effectiveness and feasibility of digital radiography
effectiveness of various caries diagnostic methods in private practice
usefulness of electronic dental record and automated recording on long-term patient oral health in private practices
is an electronic office really more efficient and less costly in the long-run than a paper office?

whitening (n = 15)

long-term effects of different methods of tooth whitening on teeth and pulp
trends in demand for cosmetic procedures among patients in private practice
optimum patient education techniques about cosmetic procedures

malocclusion (n = 12)

effect of un-treated malocclusion on tooth wear and periodontal health
effectiveness of early orthodontic intervention
long-term effects of extracting 1st molars in 12-30 year old age group
differences in long-term effects of treating or not treating certain malocclusions
long-term benefits of extracting 3rd molars