

The American Academy of Pediatric Dentistry Research Agenda

Latest Revision

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The American Academy of Pediatric Dentistry (AAPD) recognizes that high-quality evidence is the foundation of the science and practice of pediatric dentistry. Clinical care should adhere to evidence-based dentistry principles. Where evidence is insufficient, relevant research should be conducted to help fill scientific gaps and better inform clinical practice. The AAPD Council on Scientific Affairs is charged with updating and affirming the AAPD's *Research Agenda*.

The AAPD's *Research Agenda* highlights strategic research topics relevant to the mission of pediatric dentistry. To help improve individual patient and population oral health outcomes, the AAPD urges academic, state, federal, philanthropic, and corporate funding agencies to devote resources to the following research priorities.

- **Clinical:** Improving diagnosis, prevention, and management of oral, dental, and craniofacial conditions. Areas of particular interest include emerging dental caries prevention and management agents and technologies; minimally invasive dentistry and the preservation of the natural dentition; precision/personalized oral health care; and technologies and strategies to monitor and promote health and self-care.
- **Interdisciplinary:** Understanding, addressing, and eliminating oral health disparities to optimize oral and systemic health. Important considerations are behavioral and social determinants of health; basic science of craniofacial development; microbiology and microbiome research; patient

and health professional education research, development of evidence-based public health interventions; clinical trials focusing on children and vulnerable populations; integration of dentistry into the broader health care delivery system; bioinformatics; quality of care; models of interprofessional collaboration; data mining and analysis; and telehealth/teledentistry; and artificial intelligence (AI) and its impacts on diagnosis, treatment, and other aspects of clinical care including the patient and provider experience.

- **Translational:** Advancing scientific knowledge into practice and policy through education, dissemination and implementation of evidence-based care principles into clinical practice; mitigating barriers to dissemination and implementation; and academic, policy, and practice partnerships.
- **Operational safety and environmental impact:** Promoting awareness and understanding of health and safety issues within the practice of pediatric dentistry and protecting patients and dental teams from risks of infection transmission and other potential hazards in the health care setting. Priorities include infection control, personal protective equipment, waterline disinfection, sterilization techniques, environmental impact to/from dentistry, and provider mental and physical well-being.