The American Academy of Pediatric Dentistry Research Agenda

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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 be based on evidence-based dentistry principles. Where there is insufficient evidence, 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 Research Agenda.

The AAPD 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's urge academic, state, federal, philanthropic, and corporate funding agencies to devote resources to the following areas:

- **Clinical research:** Improving diagnosis, prevention, and management of oral, dental, and craniofacial conditions (e.g., emerging dental caries prevention and management agents, minimally invasive dentistry and the preservation of the natural dentition, precision/personalized oral health care, technologies and strategies to monitor and promote health and self-care).
- **Interdisciplinary research:** Understanding, addressing, and eliminating oral health disparities to promote oral health (e.g., basic behavioral and social determinants of health; basic science of craniofacial development; microbiology and microbiome 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; emerging technologies [the application of artificial intelligence {**AI**}, big data; data mining and analysis using machine learning with AI; and telehealth/teledentistry]).
- **Translational research:** Moving scientific knowledge into practice and policy (e.g., dissemination and implementation of evidence-based care principles into clinical practice, barriers to dissemination and implementation, policy and practice partnerships).
- **Operational safety and environmental impact research:** Increasing understanding of health and safety issues within the established and remote practice of dentistry and the protection of pediatric patients and dental/healthcare professionals from risks of infection transmission (e.g., infection control, personal protective equipment, waterline disinfection, sterilization techniques, environmental impact to/from dentistry).