

## Background

- For children and adults alike, proper oral healthcare is an essential component to having good overall general health. Oral health concerns can cause significant disruptions to one's physical health and emotional well-being. Dental caries is the most common chronic and preventable disease of childhood. Dental caries may cause disturbances for children including negatively influencing behavior, sleeping patterns, eating abilities, nutrition intake, ability to learn, and growth and development.
- Restoration of teeth affected by dental caries is indicated and crucial to reducing risks of pain and infection as well as restoring function. In cases of large or multi-surface carious lesions, full coverage crown restorations may be indicated.<sup>2</sup> Pediatric dentists have a variety of options when choosing the type of full coverage crowns that may be utilized for restorations in the primary dentition. Many factors may influence the types of crowns utilized, including: location of tooth, patient's age, remaining tooth structure, behavior of child, parental preferences, available materials, costs, and esthetic concerns.<sup>1</sup>
- Dental practitioners are introduced to the different types of full coverage crown restorations and other dental materials in dental school and during residency. Clinical experiences with these different materials are critical to understanding the restorative options thoroughly and mastering clinical procedures. However, not all training experiences and opportunities to practice with different types of dental materials are the same.

## Objectives

To survey current American Academy of Pediatric Dentistry (AAPD) residents on their experiences and desired experiences utilizing different types of full coverage crown restorations.

## Methods

- The survey was approved by the Wayne State University Institutional Review Board.
- Current AAPD pediatric dentistry residents received an email advertising the study. The advertisement included details concerning the study (e.g., the name of the PI, title, and purpose of the study), a description of consent, and a link to the online survey form.
- Participating residents were asked questions regarding their experiences and desired experiences with preformed full coverage crown restorations. Responses were anonymous.

## Results

51 survey responses were used for analysis:

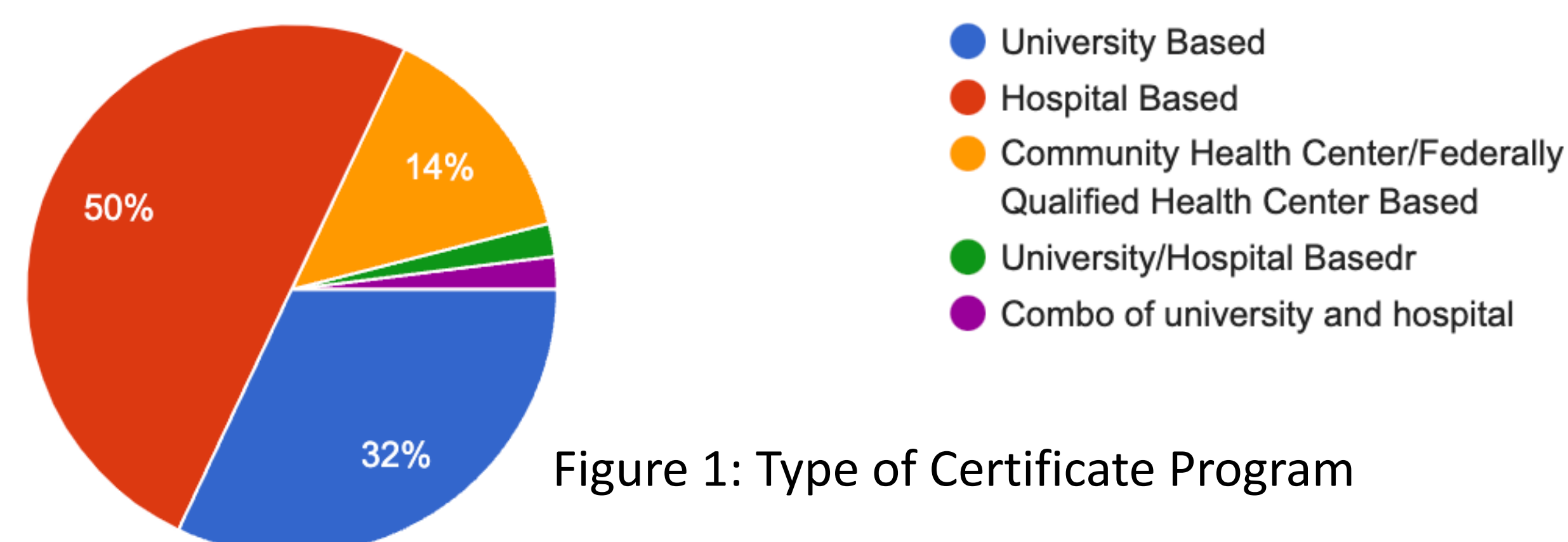


Figure 1: Type of Certificate Program

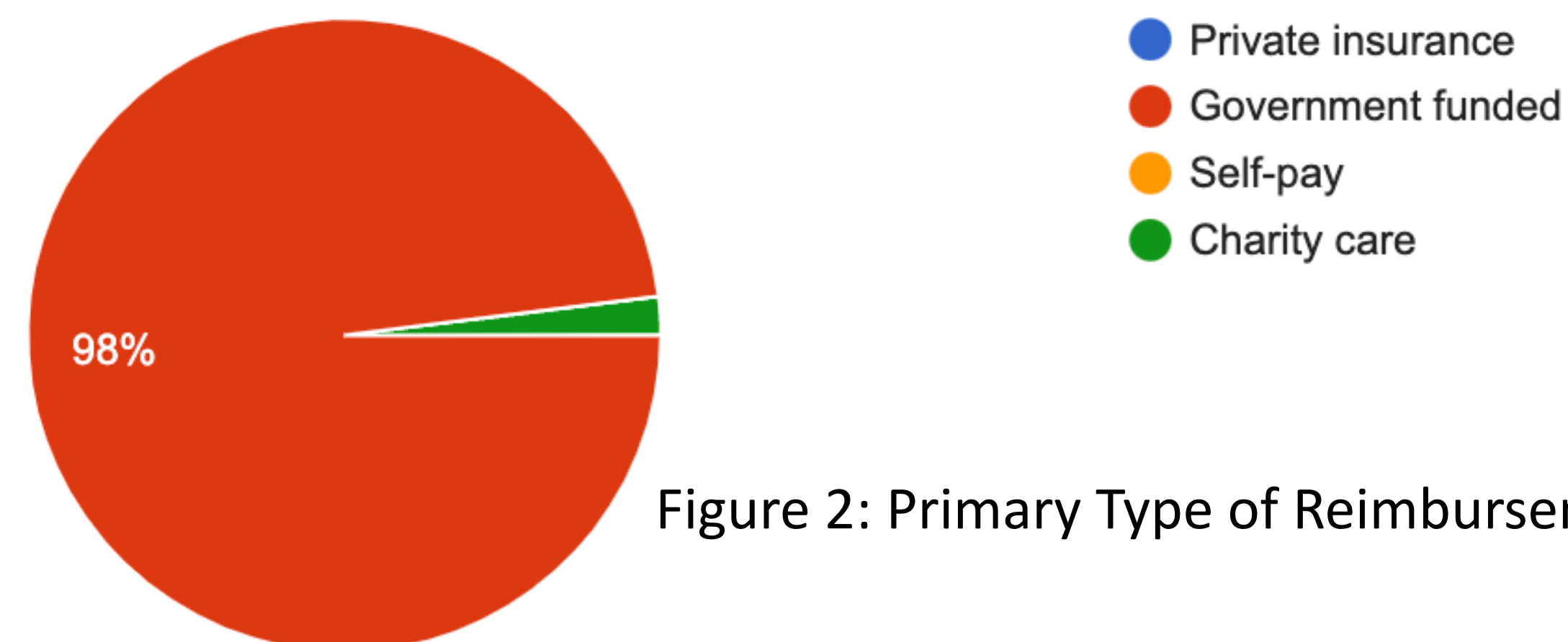


Figure 2: Primary Type of Reimbursement

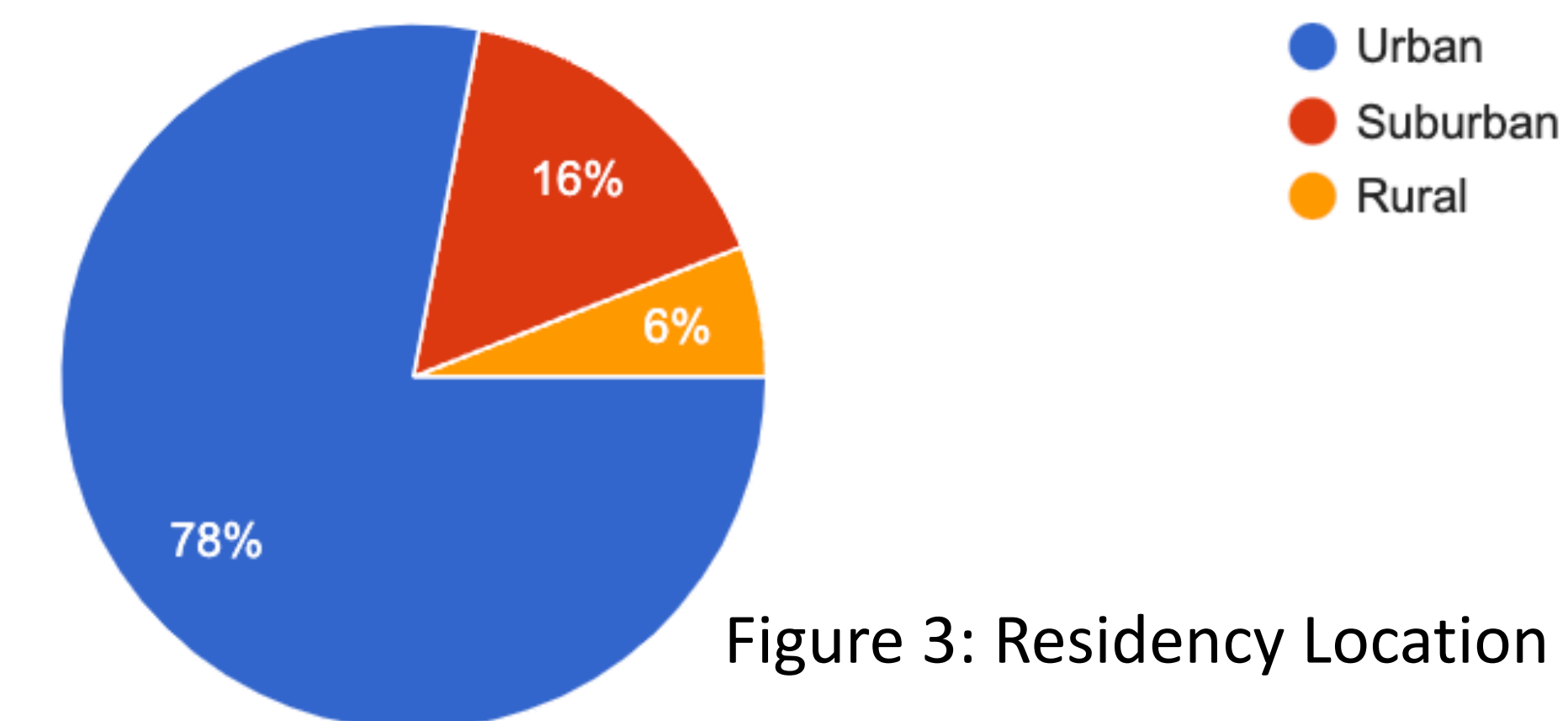


Figure 3: Residency Location

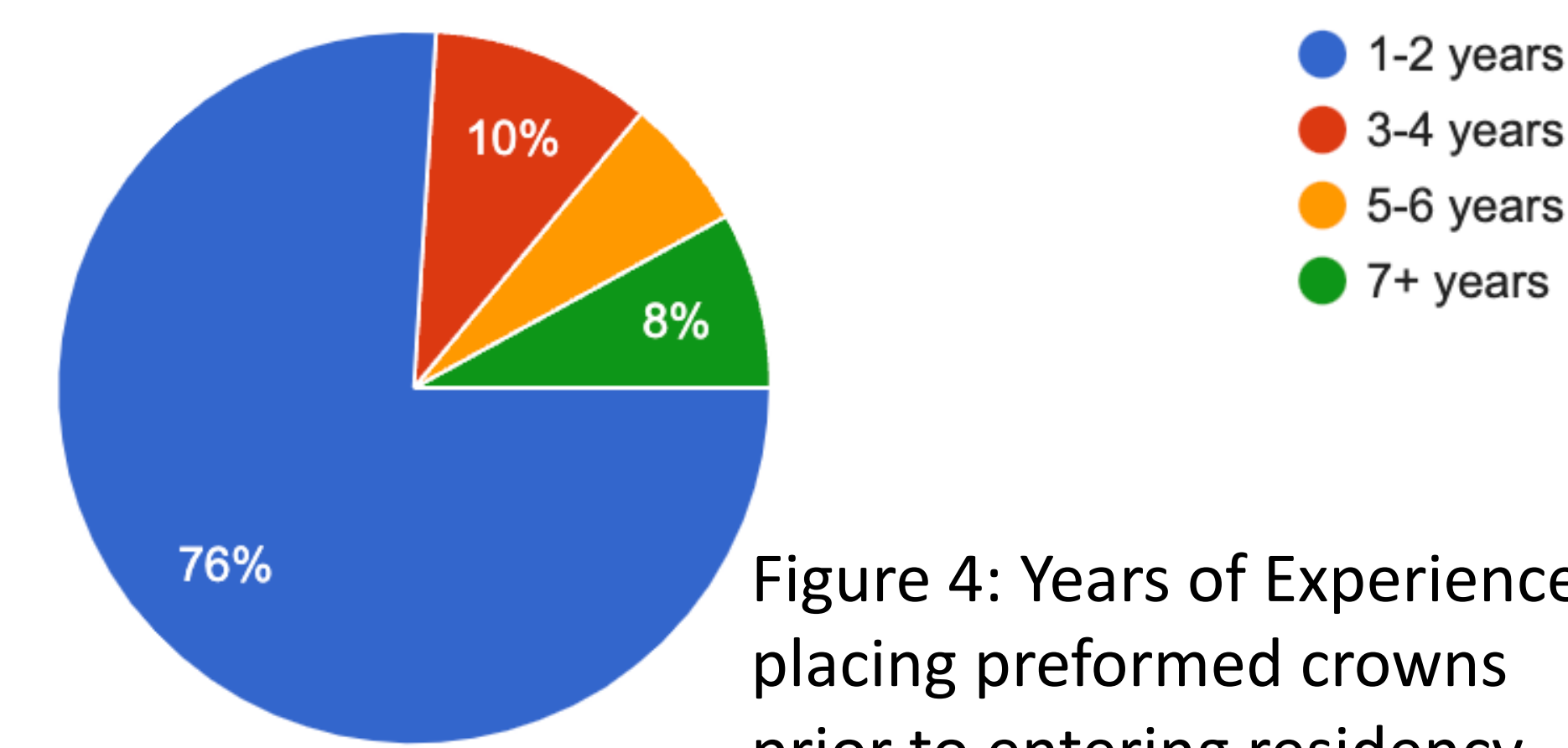
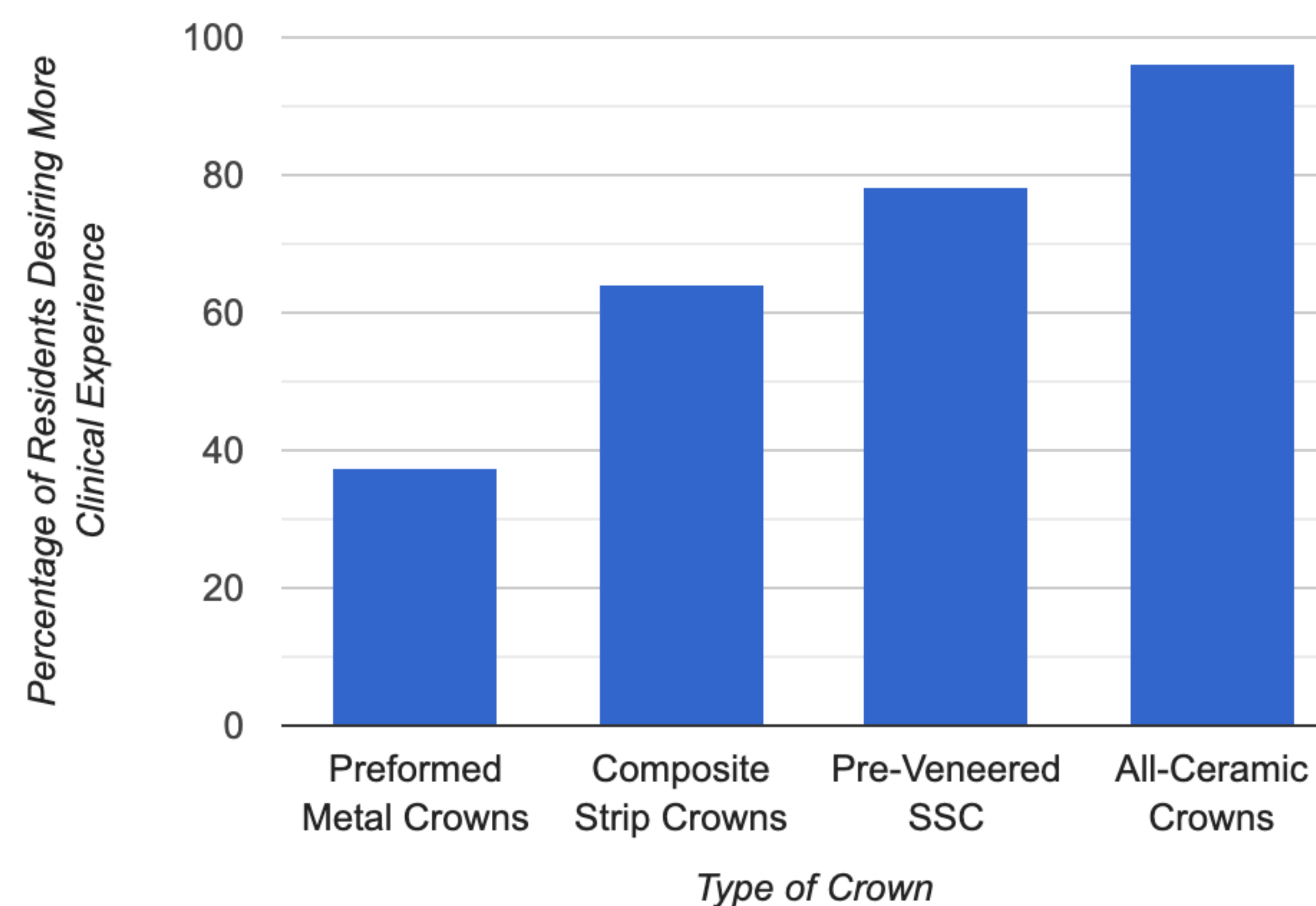


Figure 4: Years of Experience placing preformed crowns prior to entering residency

## Resident Desired Experiences With Different Types of Preformed Crowns



## Conclusions

- 51 responses were collected, accounting for approximately 6.2 percent of AAPD pediatric dentistry residents in the United States.
- 50 percent of respondents are from a hospital-based certificate program.
- 76 percent of respondents are practicing in an urban residency location.
- 98 percent of the primary type of reimbursement for these residencies is government funded.
- Previous experience: 76 percent of respondents have had 1-2 years experience using preformed full coverage crowns prior to entering residency
- Desired experiences:
  - 37.3 percent of respondents desire more experiences with preformed metal crowns
  - 64.0 percent of respondents desire more experiences with composite strip crowns
  - 78.4 percent of respondents desire more experiences with pre-veneered stainless steel crowns
  - 96.1 percent of respondents desire more experiences with all-ceramic crowns
- This information may be utilized to give AAPD Pediatric Dentistry Residency Programs an idea of their strengths and weaknesses regarding resident experiences with full coverage crowns when compared to other programs. Programs may also use this information to determine potential barriers to diversifying resident experiences as well as potential solutions.

## References

- Liu, Jungyi Alexis, and Kevin J. Donly. "A review of Esthetic Crowns for the Primary Anterior Dentition." *Decisions in Dentistry*. October 2016; 2(10):18, 21-25.
- Nowak, Arthur J, et al. "Restorative Dentistry for the Primary Dentition." *Pediatric Dentistry: Infancy Through Adolescence*, 6<sup>th</sup> ed., Elsevier, 2019, pp 304-328.

## Acknowledgements

- Thank you to Dr. James Stenger, DDS, Dr. Mary Hannawa Calek, DDS and Dr. Eric Fuller, PhD, for their support and guidance during this research project.
- This project was made possible by funding provided by the Children's Hospital of Michigan Foundation.