

Cost of Treating New Surface Decay vs. Additional Recare Visits



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INTRODUCTION

- Kid-1 is a pediatric dental clinic located in a rural community, Casa Grande, Arizona, that provides in office procedural sedation and general anesthesia (GA).
- This clinic is also a training site for NYU Langone pediatric dental residents.
- The goal of this research is to better serve the community of Casa Grande by placing the patients on an appropriate recall schedule to help prevent future new treatment.

PURPOSE

- Evaluate patients with new surface lesions whom previously had treatment performed under GA and investigate the following:
 - 1) The cost of newly treated teeth under the subsequent appointments.
 - 2) Potential cost benefit for placing a patient on 3 months recall as is recommended for patients at high caries risk by the AAPD.
 - 3) Does the age of the patient at the initial GA appointment a factor in future development of new surface caries?

METHOD

- This study is a retrospective analysis of pediatric patients who were evaluated 12 months or more after the initial GA appointment.
- The average cost of subsequent treatment of new surface lesions per year is compared to the cost of two additional recall visits per year.
- This study reviewed charts of pediatric patients between the ages of 18 – 96 months with treatment completed between 2017-2020 under procedural sedation and GA

FIGURE 1

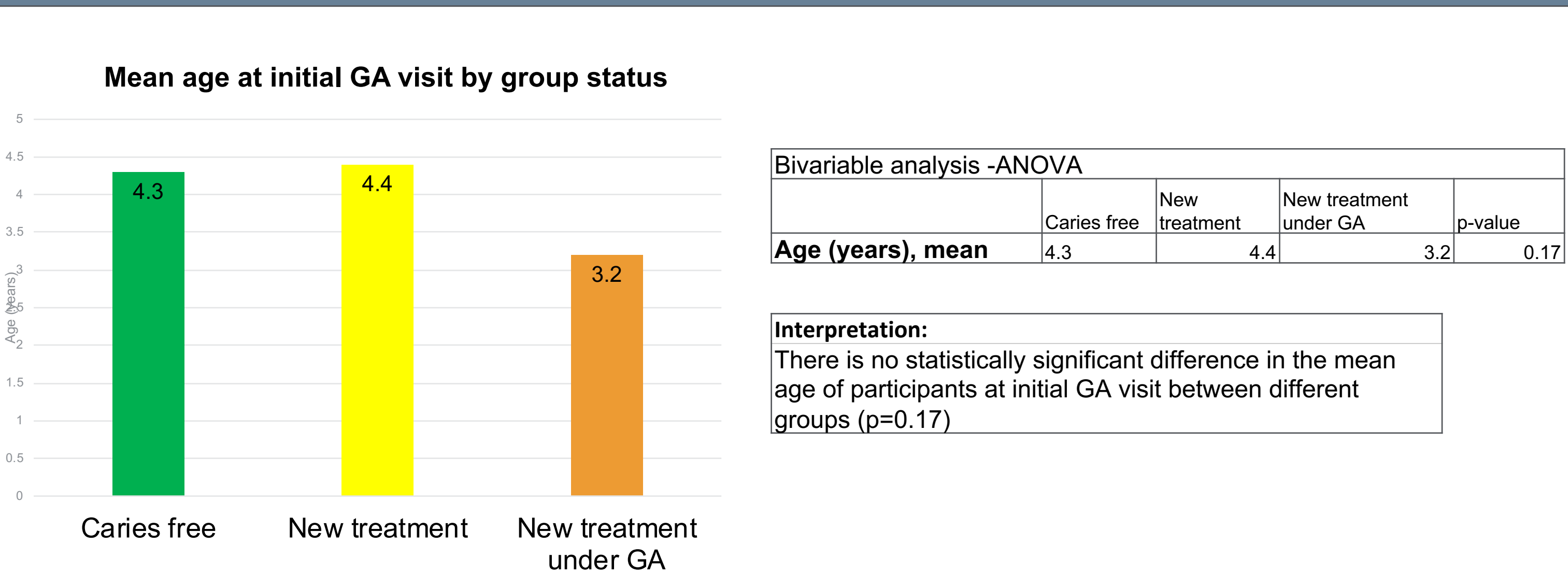
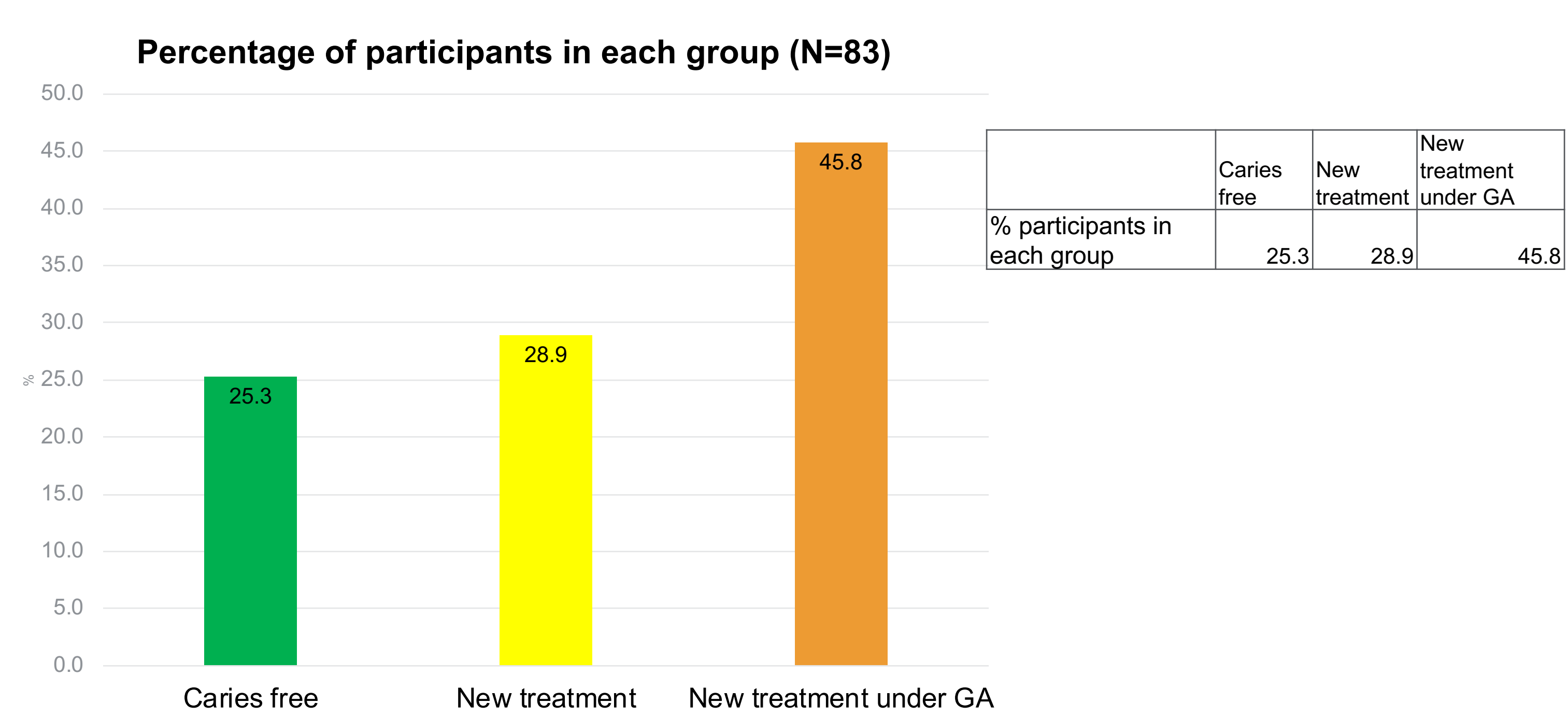


FIGURE 2



RESULTS

- 83 pediatric patients met the criteria for the retrospective study.
- 21 patients (25.30%) were caries free for at least 12 months after their initial GA appointment.
- 62 patients (74.70%) had new lesions after their initial GA appointment that were restored in subsequent operative appointments.
- 38 patient (45.78%) had new treatment done under an additional GA.
- There is no statistically significant difference in the mean age of participants at initial GA visit between different groups (p=0.17)
- The cost for two additional recall visits per person per year is \$270.
- The average cost of new treatment per patient per year is \$737.96.
- \$467.96 more spent per patient per year on average.

CONCLUSIONS

- 1) Patient having treatment completed under GA should be placed in the category of high caries risk and thus should have a recall schedule of every 3-month despite of their age at the initial GA appointment.
- 2) The age of the patient at the time of the initial GA was not a factor in determining the future likelihood to develop new surface caries
- 3) Two additional hygiene visits after treatment under GA has the potential to save \$467.96 per patient per year if no subsequent therapy is required because of appropriate follow up.
- 4) This hypothesis should be further investigated by a randomized control study where the cost of new treatment post initial GA can be compared between a group placed on recall visit every 6 months to a group placed on a recall visit every 3 months.

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