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The Effect of a Nominal Fee on Treatment Choices for Children Needing Dental Rehabilitation

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EFFECT OF A NOMINAL FEE ON TREATMENT CHOICES FOR CHILDREN NEEDING DENTAL REHABILITATION

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Virginia Commonwealth University.

by

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Abstract

EFFECT OF A NOMINAL FEE ON TREATMENT CHOICES IN CHILDREN NEEDING DENTAL REHABILITATION

By D'Audra Michelle Cole, B.S., D.D.S.

A Thesis submitted in partial fulfillment of the requirements for the degree of Masters of Science at Virginia Commonwealth University.

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Objective: The purpose of the study was to determine if a co-payment resulted in a differential preference for general anesthesia (GA) or oral sedation (OS) and, if so, to examine whether age, the number of appointments, perceived risks of treatment, child's awareness during treatment, or insurance type appeared to play a role in this preference.

Methods: Using a cross-sectional survey design, questionnaires were distributed to caregivers of patients in the waiting room of the Virginia Commonwealth University Pediatric Dental Clinic. Two different questionnaires were distributed randomly. Both surveys described a scenario with the need for dental treatment under general anesthesia

(GA) or oral conscious sedation (OS). Seventy five surveys required a $50 co-payment for treatment completed under general anesthesia and the other 75 required the same co-payment for treatment completed under oral conscious sedation. Caregivers were asked to choose treatment modalities as well as to rate factors in their decision making including perceived risks and the number of dental visits.

Results: Seventy seven survey respondents selected GA as their preferred treatment option for the described scenario. The other sixty six respondents chose OS sedation. For the insured population, the GA/OS odds ratio for the OS-co-payment group versus the GA-co-payment group was OR=2.21 (95% CI = 1.06, 4.60). In terms of the uninsured, the GA/OS odds ratio for the OS-co-payment group versus the GA-co-payment group was OR=17.5 (95% CI = 1.60, 191). The child's age, awareness during treatment, and type of insurance (public versus private) were not significantly related to treatment choice. The importance of the number of appointments was found to be significant (p-value = 0.0170) and outweighed the effect of the co-payment (p-value = 0.1757). The importance of associated risks was found to be significant (p-value = 0.0171) and this outweighed the effect of the co-payment (p-value = 0.8157).

Conclusions: The presence of a co-payment does not as significantly impact the GA versus OS preference while the number of appointments and perceived risks associated with the treatment remain significant.

INTRODUCTION

Early childhood caries and rampant decay are prevalent in the pediatric Medicaid population today. Often these children present with decay in all four quadrants of the mouth and require full mouth dental rehabilitation including multiple extractions, pulpal therapy, and full coverage restorations. Dental visits for these children are often prompted by dental pain, dental abscesses, or school required dental check-ups.[1] Treatment options for these patients include general anesthesia, conscious oral sedation, inhalation sedation, and non-pharmacological behavior management with conventional dental treatment. Non-conventional dental treatment, such as treatment under general anesthesia or with oral sedation, may be indicated because of the extensiveness of the decay, poor patient cooperation, medical complications, and/or parent preference.[2]

Medicaid and other related programs such as the State Children's Health Insurance Program (SCHIP) have provided access to dental care for children from low income families. Although children covered under the Medicaid program have higher rates of dental insurance coverage as compared to their counterparts in higher socioeconomic levels they have less dental visits. Rather, these children have more extensive oral disease and often seek dental care solely for pain rather than for preventive dental services.[3] In fact, Bailit et al found that since the overall utilization of Medicaid is low, the programs

effects are limited and improvements in overall oral health result from prevention rather than restorative services.[4]

Parents of children reporting for their first dental visit are often bombarded by their children's diagnosis of early childhood caries or rampant decay and the recommendations for treatment. Alternatives to conventional dental treatment such as general anesthesia and oral conscious sedation are treatment options that are frequently offered when there are multiple carious lesions and the child is uncooperative.[5] Current law requires that all patients and/or guardians be fully informed of procedures, complications, and costs associated with medical and dental treatment. Often parents of children undergoing non-conventional treatment for dental rehabilitation are unaware of the procedures their children will undergo and the risks associated with those procedures.[6] Although it has been shown that patients undergoing inhalation sedation versus general anesthesia have less anxiety, parents often choose general anesthesia for its one-appointment convenience.[7] Because the demand for general anesthesia appointments is so high, patients may expect an average delay of 71 days with no pain and 28 days if pain is reported versus an average of 36 days for a sedation appointment.[8] Oral conscious sedation is also a viable alternative for many of these patients and is associated with less morbidity and mortality than general anesthesia.[9]

As with any medical or dental procedure, there are risks and benefits associated with different treatment modalities. Another important aspect of the dental treatment is cost. The impact of co-payments, cost-sharing, and type of medical/dental insurance has been shown to impact the utilization of medical and dental services in addition to the

expenditures for prescription drugs.[10] It has been documented that individuals with less cost-sharing of treatment expenses have higher levels of dental utilization than those with a larger cost-sharing burden.[11] It has also been shown that insurance type and cost-sharing effect oral health outcomes as well. Bailit at al found that reduced cost sharing does not lead to major increases in overutilization, and in fact, less cost sharing increases timeliness and the amount of preventative and curative services; even with free care, there is still substantial undertreatment.[12]

Dental rehabilitation under general anesthesia provides a single appointment convenience and lack of patient cooperation following induction. However, there is an increased risk of mortality as compared to conscious sedation when the Guidelines for Monitoring and Management of Pediatric Patients During and After Sedation for Diagnostic and Therapeutic Procedures are followed.[13] Conscious Sedation may require multiple appointments, but offers relative safety and the possible acquisition of coping skills for some patients.

There are costs associated with non-conventional dental treatment in addition to extensive dental treatment costs. It has been documented that costs for dental treatment performed under general anesthesia are higher than that costs associated with oral conscious sedation.[14] A study conducted in Iowa of costs associated with hospitalization of children for dental treatment showed Medicaid costs to be $2,099 per case.[15] Another study conducted in Louisiana showed that $3, 229, 851 was spent on dental treatment under general anesthesia from October 1996 to September 1997 for 2,142 children.[16] A second study conducted by Lee et al found that a single general anesthesia appointment

carried an average charge of $2,326 while a single oral sedation appointment carried an average charge of $1,363; thus conscious sedation appointments exceeding three for a given patient were more costly than a single general anesthesia appointment for the same patient when other important factors such as missed school and work time are taken into account.[17] When recommending non-conventional dental treatment for a child, it is important to understand the role that costs, risks, and benefits play in a caregiver's decision-making for their child's dental treatment to be both efficient and cost-effective. This study examined how a co-payment, perceived risks, complications, benefits, or multiple appointments influence the selection of treatment modalities. The purpose of the study was to determine if a co-payment resulted in a differential preference for GA or OS and, if so, to determine whether age, the number of appointments, perceived risks of treatment, child's awareness during treatment, or insurance type appeared to play a role in this preference

METHODS

Design

This study used a cross-sectional survey design in which caregivers of patients presenting for dental treatment at the VCU Department of Pediatric Dentistry were invited to participate. After obtaining informed consent, the caregivers completed a survey including a brief but concise statement about oral conscious sedation and general anesthesia treatment options including possible risks and complications. Two different surveys were administered at random. The first survey described a scenario with the need for dental treatment under general anesthesia or oral conscious sedation and required a co-payment of $50 for oral conscious sedation. The second survey presented an identical scenario requiring a $50 co-payment for general anesthesia. Caregivers were asked to select either oral conscious sedation or general anesthesia for treatment of their child. Cofactors that may have also impacted treatment decisions were assessed on a Likert scale where respondents rated them as VERY important, SOMEWHAT important, IMPORTANT, LESS important, and NOT important. These cofactors included child's awareness of treatment (asleep vs. semiconscious), the number of visits to complete treatment, and the risks associated with treatment. Additional survey items assessed the reason for the current dental visit, whether or not their children have decay, treatment modalities the child has experienced in the past and type of insurance coverage. This study

was approved for Human Subjects by the Virginia Commonwealth University Institutional Review Board.

Statistical Analysis

The purpose of the study was to determine if a co-payment resulted in a differential preference for GA or OS and, if so, to determine whether age, the number of appointments, perceived risks of treatment, child's awareness during treatment, or insurance type appeared to play a role in this preference.

A logistic regression model was used to determine the effects on the preference between GA and OS for the insured and non-insured respondents separately (JMP version 6.0.3, SAS Institute Inc., Cary NC). For the subset of insured respondents, the possible effects on treatment preference (ages of the children, the number of appointments, risks, awareness of dental treatment, or insurance type) were each considered along with the presence of a co-payment for GA or a co-payment for OS. Significant predictors were combined into a single model to describe the relationships between each of the predictors and the procedure preference.

RESULTS

In total, 150 surveys were distributed and 143 surveys were returned completed for a response rate of 95%. N = 71 responded to the form that specified that a $50 co-payment would be required for an oral sedation (OS), and N = 72 for the $50 co-payment for general anesthesia (GA).

Demographics

The characteristics of the study participants are shown in Table 1. Approximately one-quarter of patients were in the clinic for each of the following three reasons: new patient, cleaning, or fillings and/or crowns. More than half (58%) knew that their children had cavities. The average age of children was 7.9 years (SD = 3.8, range = 1 to 15). Most understood that their child was to be treated without nitrous oxide, OS, or GA (60%) and almost half (49%) had no experience with nitrous oxide, OS, or GA. Sixty-four percent were publicly insured.

Choice of Treatment Modality

In terms of choosing a treatment modality, 77 (54%) survey respondents selected general anesthesia as their preferred treatment option for the described scenario and the remaining 66 (46%) respondents chose oral conscious sedation. 54 (38%) respondents

chose the treatment option associated with the $50 co pay whether it be general anesthesia or oral conscious sedation, while 62% chose the non-co-payment treatment option.

There were N = 22 study participants who responded “no” to the “do you have dental insurance?” question or did not respond to the question. Since a question about insurance co-payment is not sensible if one does not have insurance and because these participants were found to respond differently than those with insurance, they were excluded from the multivariate analysis. As a result, N=60 OS-co-payment questionnaires and N=61 GA-co-payment questionnaires were included in the multivariate analysis.

The Effect of Co-Payment on Treatment Choice

The relationship between the preference for the GA versus OS treatment option and whether the option includes a co-payment is shown in Table 2. In those with insurance, the odds of choosing GA versus OS in the group where the choice is GA-co-payment versus OS-no-co-payment is 0.91 (29/32), whereas the GA versus OS odds in the group where the choice is GA-no-co-payment versus OS-co-payment is 2.0 (20/40). So the GA/OS odds ratio for the OS-co-payment group versus the GA-co-payment group is OR=2.21 (95% CI = 1.06, 4.60). That is, folks prefer GA twice as much if OS has a co-payment than if GA has a co-payment.

This is quite different in those without insurance. In the N=22 who did not indicate that they had insurance, the odds of choosing GA versus OS in the group where the choice is GA-co-payment versus OS-no-co-payment is 0.10 (1/10), whereas the GA versus OS odds in the group where the choice is GA-no-co-payment versus OS-co-payment is 1.75

(7/4). So the GA/OS odds ratio for the OS-co-payment group versus the GA-co-payment group is OR=17.5 (95% CI = 1.60, 191). That is, noninsured folks prefer GA 17.5 times as much if OS has a co-payment than if GA has a co-payment.

For those 50 respondents that chose to accept the co-payment for their choice of treatment modality, they rated the effect of that co-payment seen in Table 3. 10 (20%) survey respondents rated the co pay as VERY important; 7 (14%) rated the co pay as SOMEWHAT important; 8 (16%) rated the co pay as IMPORTANT; 11 (22%) rated the co pay as LESS important; 13 (26%) rated the co pay as NOT important and 1 (2%) gave no response.

Cofactors Affecting Treatment Choice

Cofactors for treatment choices were rated on a Likert scale. Both the number of appointments and associated risks of treatment appeared to be related to treatment choice of either GA or OS and are presented in Tables 4 and 5. The child's age, awareness during treatment, and type of insurance (public versus private) were not related to treatment choice. The preference away from the co-payment option and its relationship to the number of appointments needed for the GA and OS are shown in Table 4. In this instance, the importance of the number of appointments is significant (p-value = 0.0170) and this outweighs the effect of the co-payment (p-value = 0.1757). The effect of appointments is consistent across the two co-payment groups (p-value = 0.4250). The preference away from the co-payment option and its relationship to the associated risks of the GA and OS are shown in Table 5. In this instance, the importance of associated risks is

significant (p-value = 0.0171) and this outweighs the effect of the co-payment (p-value = 0.8157). The effect of risk is consistent across the two co-payment groups (p-value = 0.3014).

Regression results

To summarize, co-payment, the number of appointments, and associated risks of the treatment seem to individually have some bearing on the GA versus OS treatment option preference. A multiple logistic regression of all three of these factors indicates that after the number of appointments and perceived risk are taken into account, the presence of a co-payment does not as significantly impact the GA versus OS preference (p-value < 0.10), while the number of appointments (p-value < .0001) and perceived risks associated with the treatment (p-value = 0.0004) remain significant. This is illustrated in Table 6.

DISCUSSION

This survey found that a co-payment does not have a statistically significant effect on caregivers' choices of treatment options for children needing dental rehabilitation. Survey respondents selected general anesthesia slightly more often (54%) than oral conscious sedation as their modality of preference. Previous studies have had varying results in examining caregivers' preferences of non-conventional treatment modalities. Murphy et al. concluded that parents found conscious sedation and general anesthesia least acceptable when compared to other behavior management techniques, but that oral conscious sedation would be preferable to general anesthesia.[18] A study conducted by Alammouri et al., found that parents accepted general anesthesia more than oral conscious sedation and hypothesized that this was because parents considered general anesthesia a less time consuming technique as all required dental treatment could be completed in a single visit. [18] The current study found that 66% of caregivers felt that the number of appointments was VERY important when their choice of treatment was general anesthesia versus 39% when their choice was oral conscious sedation. It seems that many parents and guardians are reluctant to return to the dental clinic multiple times to complete dental treatment.

The current study provided a one page informational sheet about general anesthesia and oral conscious sedation as well as their respective risks and benefits. Caregivers were

asked to read the informational page before responding to the survey questions which asked them to choose between the two treatment options. The use of an informational page brings up the concept of informed consent. Tahir et al found that parents did not fully understand the consent after being adequately informed of procedures and types of anesthesia being used for their children.[6] Furthermore, they found that parents did not appear overly concerned about the risks of the different types of anesthesia because they did not perceive the potential hazards to their children.[6] The General Dental Council requires the dentist to explain to the patient, (and/or in this case the parent) the proposed treatment, risks involved, and alternative treatment and to obtain a written consent.[6] When asked about the importance of risks 57% of respondents who chose general anesthesia as their treatment modality felt the risks were VERY important to their choice, whereas 77% of those that selected oral sedation rated risks as VERY important. As such, it appears that caregivers felt that general anesthesia was safer as compared to oral conscious sedation.

In the current study there was no significant correlation found between awareness of treatment and choice of treatment modality, however, 70% of caregivers who chose general anesthesia rated awareness as VERY important, and 71% of caregivers who chose oral conscious sedation rated awareness as VERY important to their choice of treatment. This is not surprising in today's culture when many people are looking for practices that specialize in "Sleep Dentistry". Many parents come to the dental clinic asking for their children to be put to sleep for even the slightest of dental procedures including routine cleanings and the placement of sealants. A large percentage of children are no longer expected to exhibit "good behavior" in the dental chair as dental treatment is expected to

be a bad experience and induce moderate to severe anxiety. A study conducted by Arch et al, found that children (ages 9-15) who had chosen to undergo inhalational sedation as opposed to general anesthesia for dental extractions showed less post-operative dental anxiety.[7] Thus, treatment under conscious sedation may help to build coping mechanisms in children and may help to allay fears of future dental treatment. Arch at el also found that children undergoing general anesthesia reported the same level of dental anxiety both before and after dental treatment; these children have little to no participation in their dental care and thus, little opportunity to learn from their experience.[7]

When asked about previous experience with behavior management techniques, such as nitrous oxide, oral conscious sedation, or general anesthesia, approximately half of survey respondents (49%) had no experience. Of those with experience, oral conscious sedation had been most utilized (23%). Any familiarity with these behavior management techniques may have influenced the caregivers' choices of treatment modality. Also, media coverage of untoward events related to sedative agents may have been in the minds of caregivers while taking the survey and may have impacted their decisions.

Eighty-six percent of survey respondents reported having dental insurance coverage for their children. 64% of caregivers reported to have publicly funded dental insurance. The choice of treatment modality was affected by the caregivers having dental insurance for their children. Insured survey respondents preferred general anesthesia twice as much as oral sedation if there was a co-payment required for oral sedation. In contrast, noninsured respondents preferred general anesthesia 17.5 times more than oral sedation if a co-payment was required for oral sedation. The informational page listed multiple visits

under risks of treatment for oral conscious sedation. Multiple visits could, in time, prove more costly than one general anesthesia appointment. In fact, a study conducted by Lee et al found that conscious sedation appointments exceeding three for a given patient was more costly than a single general anesthesia appointment for the same patient.[13]

There were a few limitations to this study including a lack of risk and benefit reinforcement within the survey questions and biased study population. Caregivers may not have read the informational page and skipped immediately to the questions, thus their true understanding of the procedures, risks, and benefits, may be questionable. Perhaps the survey would have been better served by having the informational piece read by the study investigator with an opportunity for questions by the respondents. Also, the high number of children seen at the Virginia Commonwealth University pediatric dental clinic with Medicaid may have affected results as these caregivers have little knowledge of true dental costs. Future studies should isolate treatment preference when there is no co-payment for either treatment modality, and when there are co-payments for both modalities in comparison to this study's results.

CONCLUSIONS

This study had four major findings:

1. Insured survey respondents prefer GA twice as much if OS has a co-payment than if GA has a co-payment.

2. Noninsured respondents prefer GA 17.5 times as much if OS has a co-payment than if GA has a co-payment.

3. The child's age, awareness during treatment, and type of insurance (public versus private) were not related to treatment choice.

4. The presence of a co-payment does not as significantly impact the GA versus OS preference while the number of appointments and perceived risks associated with the treatment remain significant.

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Table 1. Demographics

Characteristic	Percent	(N)
Reason for today's visit (Select one):		
New Patient	25	(30)
Cleaning	26	(32)
Fillings or crowns	26	(32)
School check up	0	(0)
Emergency (Pain)	9	(11)
Referral	13	(16)
Does your child(ren) have cavities that you know of:		
Yes	58	(69)
No	42	(50)
Is your child receiving dental treatment with any of the following:		
Laughing Gas (nitrous oxide)	21	(25)
Oral Sedation (medicine by mouth)	18	(21)
General Anesthesia (put to sleep)	2	(2)
(none)	60	(72)
Has your child(ren) had experience with any of the following for dental treatment:		
Laughing Gas (nitrous oxide)	14	(17)
Oral Sedation (medicine by mouth)	25	(30)
General Anesthesia (put to sleep)	12	(15)
(none)	49	(59)
What type of dental insurance do you have?		
Public	64	(78)
Medicaid	47	(57)
Famis	17	(21)
Private	36	(43)
Delta Dental	9	(11)
Other	26	(32)

Table 2. Choice of Treatment Modality and Co-payment Effect

		Percent (n)			Odds Ratio (95% CI)		
		Treatment Choice			Copay for OS vs Copay for GA		
Copay	Insurance	GA	OS	N			
GA	No	9 (1)	91 (10)	(11)	17.50	1.60	191.89
OS	No	64 (7)	36 (4)	(11)			
GA	Yes	48 (29)	52 (32)	(61)	2.21	1.06	4.60
OS	Yes	67 (40)	33 (20)	(60)			

Table 3. Co-Payment Effect

Rating of Co Pay Effect	N	Percent
Very	10	20
Somewhat	7	14
Important	8	16
Less	11	22
Not	13	26

Table 4: Relationship between co-payment and procedure preference, depending upon the importance of the number of appointments.

		Percent (n)		
		Choice		
Copay	# Appt	GA	OS	N
GA	A:Very	63 (20)	38 (12)	(32)
GA	B:Somewhat	50 (5)	50 (5)	(10)
GA	C:Important	13 (1)	88 (7)	(8)
GA	D:Less	33 (2)	67 (4)	(6)
GA	E:Not	25 (1)	75 (3)	(4)
	total	48 (29)	52 (31)	(60)
OS	A:Very	78 (25)	22 (7)	(32)
OS	B:Somewhat	50 (4)	50 (4)	(8)
OS	C:Important	67 (8)	33 (4)	(12)
OS	D:Less	33 (1)	67 (2)	(3)
OS	E:Not	33 (1)	67 (2)	(3)
	total	67 (39)	33 (19)	(58)

Table 5: Relationship between co-payment and procedure preference, depending upon the importance of the risks associated with the procedures.

		Percent (n)		
		Choice		
Copay	Risks	GA	OS	N
GA	A:Very	42 (19)	58 (26)	(45)
GA	B:Somewhat	100 (4)	0 (0)	(4)
GA	C:Important	38 (3)	63 (5)	(8)
GA	D:Less	67 (2)	33 (1)	(3)
	total	47 (28)	53 (32)	(60)
OS	A:Very	57 (21)	43 (16)	(37)
OS	B:Somewhat	82 (9)	18 (2)	(11)
OS	C:Important	83 (5)	17 (1)	(6)
OS	D:Less	100 (4)	0 (0)	(4)
OS	E:Not	0 (0)	100 (1)	(1)
	total	66 (39)	34 (20)	(59)

Table 6: Logistic regression results

Effect	Estimate	Std Error	Chi-sq	p-value	OR	95% CI	
Intercept	0.21	0.46					
OS copay	0.70	0.42	2.77	0.0959	2.01	0.88	4.66
Appts=Very	1.86	0.50	16.74	<.0001	6.43	2.54	18.24
Risks=Very	-1.77	0.55	12.37	0.0004	0.17	0.05	0.47
Model			26.02	<.0001			

Odds of GA versus OS

APPENDIX A

Survey Instrument

Choices for Children's Dental Treatment

There are different treatment options for children who may be fearful or uncooperative during dental treatment due to their age, the amount of work needed, or other special medical conditions. **Two choices for treatment are oral sedation or general anesthesia.**

With **oral sedation** your child will be given medicine by mouth that will make your child drowsy and less likely to remember the dental treatment. This medicine may make your child fall asleep or be extremely drowsy and relaxed, although awake. Your child may still cry or resist dental treatment with oral sedation. Many children receiving dental treatment with oral sedation are given nitrous oxide (laughing gas) and are restrained with a papoose board (Velcro sleeping bag) to prevent movement and the risk of injury. Your child will still receive a local anesthetic (numbing medication for their mouth) with a needle. It works best for children who need 1 or 2 appointments to complete their dental treatment.

With **general anesthesia** your child would be put to sleep as they would for any surgery performed in a hospital. Your child will be given medicine by mouth to help them relax. In the operating room, an anesthetic gas is given to your child through a nasal breathing tube that will keep your child asleep during the dental treatment. Your child's breathing will be controlled by a breathing machine and at the conclusion of treatment the gases will be turned off allowing your child to wake up. All dental treatment needs can usually be completed in one visit.

Both general anesthesia and oral sedation have an excellent safety record but there are risks. These risks include, but are not limited to the following: infection, swelling, irritability, nausea, vomiting, and increase in temperature, allergic reactions, shock, coma, abnormal breathing, abnormal brain function, or even death.

General Anesthesia

•BENEFITS
-One appointment
-Child is unaware of dental treatment
-Can be used for children with complicated medical problems

Oral Sedation

•BENEFITS
-Child may gain coping skills
-Relatively safe as compared to general anesthesia
-Does not require a medical exam

•RISKS OR COMPLICATIONS
-Medical exam required
-Child does not gain coping skills
-Possible damage to the teeth from breathing tube

•RISKS OR COMPLICATIONS
-Multiple (2-4) appointments may be required
-May not be effective on behavior

The dentist has examined your child's mouth and found 12 cavities. Because of the number of cavities, your child would be best treated using one of two methods for treatment, general anesthesia or oral sedation. There will be a $50 co pay required for dental treatment with oral sedation.

Based on the information given above, which method would you choose for your child?

Oral Sedation	○
General Anesthesia	○

If your chose **General Anesthesia**, what helped you to make your decision:

	Very Important	Somewhat Important	Important	Less Important	Not Important
The number of appointments	○	○	○	○	○
The risks associated with general anesthesia	○	○	○	○	○
Your child's awareness of dental treatment	○	○	○	○	○
The need for a physical exam	○	○	○	○	○

If your chose **Oral Sedation**, what helped you to make your decision:

	Very Important	Somewhat Important	Important	Less Important	Not Important
The number of appointments	○	○	○	○	○
The risks associated with conscious sedation	○	○	○	○	○
Your child's awareness of dental treatment	○	○	○	○	○
$50 co pay required for oral sedation	○	○	○	○	○

The Dentist has examined your child's mouth and found 12 cavities. Because of the number of cavities, your child would be best treated using one of two methods for treatment, general anesthesia or oral sedation. There will be a $50 co pay required for dental treatment under general anesthesia.

Based on the information given above, which method would you choose for your child?

Oral Sedation	○
General Anesthesia	○

If your chose **General Anesthesia**, what helped you to make your decision:

	Very Important	Somewhat Important	Important	Less Important	Not Important
The number of appointments	○	○	○	○	○
The risks associated with general anesthesia	○	○	○	○	○
$50 co pay required for general anesthesia	○	○	○	○	○
Your child's awareness of dental treatment	○	○	○	○	○
The need for a physical exam	○	○	○	○	○

If your chose **Oral Conscious Sedation**, what helped you to make your decision:

	Very Important	Somewhat Important	Important	Less Important	Not Important
The number of appointments	○	○	○	○	○
The risks associated with oral sedation	○	○	○	○	○
Your child's awareness of dental treatment	○	○	○	○	○

Reason for today's visit (Select one):

New Patient	○
Cleaning	○
Fillings of crowns	○
School check up	○
Emergency (Pain)	○
Referral	○

What are the ages of your children being seen today?

Children	Age
Child 1	
Child 2	
Child 3	
Child 4	

Does your child(ren) have cavities that you know of?

Yes	○
No	○

Is your child receiving dental treatment with any of the following?

	Yes	No
Laughing Gas (nitrous oxide)	○	○
Oral Sedation (medicine by mouth)	○	○
General Anesthesia (put to sleep)	○	○

Has your child(ren) had experience with any of the following for dental treatment?

	Yes	No
Laughing Gas (nitrous oxide)	○	○
Oral Sedation (medicine by mouth)	○	○
General Anesthesia (put to sleep)	○	○

Do you have dental insurance?

Yes	○
No	○

If yes, what type of dental insurance do you have?

Delta Dental	○
Medicaid	○
Famis	○
Other	○
None	○

VITA

D'Audra Michelle Cole was born on October 15, 1978 in Hartford, Connecticut. She graduated from Watkinson School, Hartford, Connecticut, in 1997. She attended Albertus Magnus College in New Haven, Connecticut and received her Bachelor of Science in Biology in 2000. Dr. Cole received her Doctorate of Dental Surgery from Howard University College of Dentistry, Washington, District of Columbia in 2005.