UNIVERSITY OF CINCINNATI

Date: August 11, 2005

I, Deanna K. Hutchinson, hereby submit this work as part of the requirements for the degree of:

Masters of Science

in:

Genetic Counseling

It is entitled:
Assessment of Parental Satisfaction with Management of a Child’s Nonsyndromic Cleft Lip and/or Cleft Palate

This work and its defense approved by:

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Iris Sageser, R.D.H., M.S.
Howard M. Saal, M.D.
Assessment of Parental Satisfaction with Management of a Child’s Nonsyndromic Cleft Lip and/or Cleft Palate

Deanna K. Hutchinson, B.S.

August 11, 2005

Thesis submitted for Masters of Science in the Genetic Counseling Graduate Program

College of Allied Health Sciences

Department of Analytical and Diagnostic Sciences

Advisor: Dr. Howard M. Saal
Abstract

The purpose of this study was to assess parental satisfaction of children with nonsyndromic cleft lip and/or cleft palate concerning feeding and surgery education. This retrospective cross-sectional study used an original questionnaire. Four multidisciplinary teams in Ohio and Kentucky distributed the questionnaire to sixty-one parents of children between the ages of 3 months and 4 years with nonsyndromic clefts. Fifty percent of parents were satisfied with their experiences at the birth hospital. Parents who received feeding instructions within 12 hours after their child’s birth felt more adequately prepared to feed their child than those who did not (p=0.0042). Over 90% of parents were satisfied with the care provided by their multidisciplinary team. Since half of the parents in this study were dissatisfied with their experiences at the birth hospital, birth hospitals need to ensure parents of children with orofacial clefts are educated about feeding techniques within 12 hours after birth.
Acknowledgements

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Introduction

Cleft lip and/or palate (CLP) is among the common birth defects, affecting about one in every 750 individuals (American Cleft Palate-Craniofacial Association, 1993). Treatment of these conditions should include multidisciplinary management with a team of professionals experienced in management of children with CLP. (American Cleft Palate-Craniofacial Association, 1993) While clinical treatment for these conditions is relatively straightforward, the impact of this care on the parents is not well understood.

To date, there has not been a comprehensive study of parental satisfaction of cleft care in the United States. Only one study assessed the most important issues to families that have a child with a cleft lip and/or cleft palate (Young et al., 2001). Results showed that feeding management is critical, especially bottle and breastfeeding difficulties.

The anatomical characteristics of CLP greatly hinder an infant’s ability to feed. Poor intraoral suction may produce choking, emission of milk through the nose, and excessive air intake. Although several specialized feeding techniques have been developed and used with reasonable success, infants with CLP are at risk to suffer from undernourishment and compromised growth during the first year of life (Endriga et al., 1998; Avedian et al., 1980; Jones et al., 1988).

The majority of studies assessing parental satisfaction with cleft care have been performed in the United Kingdom. Studies in England indicate that most parents of children with CLP were satisfied with their children’s care (Jeffery et al., 2001; Noar et al., 1991; Sandy et al., 1998). Reasons for dissatisfaction included lack of involvement in treatment-planning decisions (Jeffery et al., 2001) and concern for the appearance of teeth after surgery (Sandy et al., 1998) and feeding management and education (Oliver et al, 1997). Since the healthcare delivery
system of the United States differs from that in the United Kingdom, the impact of early management and different composition of the multidisciplinary teams (MT’s) and clinics may lead to very different experiences.

Because there is a lack of data regarding parent satisfaction with their children’s early management, especially by MT’s in the United States, this study was undertaken to assess the degree of satisfaction of parents of children with nonsyndromic CLP feeding and surgery education post-birth.

**Methods**

**Participants**

This was a retrospective cross-sectional study. Ten multidisciplinary teams in Indiana, Kentucky and Ohio were offered the opportunity to participate in this study. Four teams, Akron Craniofacial Center, Cincinnati Children’s Craniofacial Center, the Commission for Children with Special Healthcare Needs in Kentucky, and the Craniofacial Clinic at the University of Kentucky agreed to participate. The clinical coordinator at each participating center was mailed questionnaires (see appendix) to distribute to the primary custodial parent of children with nonsyndromic CLP between ages 3 months and 4 years. Parents were given the option in an attached letter to choose which questionnaire form they preferred to complete, paper or web-based. All completed questionnaires were either mailed directly to the principal investigator or directly deposited into an online database. The questionnaires asked for no identifying information. Participants were asked to provide the last four digits of their social security number as a means to prevent duplicate responses. This study was approved by the Institutional Review Boards at Cincinnati Children’s Hospital and the University of Cincinnati.
*Questionnaire (See Appendix)*

The principal investigator along with three members of the Cincinnati Children’s Craniofacial Center developed the survey tool used for this study. The questionnaire targeted general demographic information about the children born with nonsyndromic CLP, as well as general questions about feeding management and cleft-related surgeries. Additionally, questions addressed parental satisfaction with their child’s post-birth feeding management and cleft lip and cleft palate surgeries. Most questions were closed-ended, with respondents choosing options from a pre-determined list or using a 4-point Likert scale. The instrument’s validity was assessed on a pilot group of parents who have a child with a nonsyndromic CLP who were managed by the Cincinnati Children’s Craniofacial Team.

*Analytical Methods*

Descriptive statistics were computed to identify resources being used. For quantitative variables, means and standard deviations were calculated while for qualitative variables frequency distributions were calculated. When analyzing questions about satisfaction that had Likert scales we clumped the responses of “very satisfied” and “satisfied” together and “dissatisfied” and “very dissatisfied” together. Chi-square and logistic regression were used to establish the importance of feeding management and cleft surgery and establish areas that need enhancement. Odds ratios with 95% confidence intervals were used to compare two groups of parents and identify if they were more likely to be satisfied than the other group. Odds ratios that do not overlap 1.0 show more satisfaction in one group than the other. All analyses were completed with SAS (version 9.0, Carey NC)
Results

Demographics

Of those 61 parents who responded, 56 (91.8%) were female. Most parents, 41 (67.2%) live in Ohio, while 17 (27.9%) live in Kentucky. The remaining three families lived in Indiana and Tennessee. Nineteen children in this study were under 2 years of age (32.2%). Fifty-three children (86.9%) were white, while the remainder of parents classified their children as Asian, Native American and bi-racial. Forty-one children were male (67.3%) and 20 were female (32.8%). (Table 1)

Feeding Management

Most parents, 36 (59.0%) reported receiving initial feeding instructions at the birth hospital, while 22 (36.1%) received initial instructions from a member of the multidisciplinary team, usually a nurse. Half of all parents felt that instruction at the birth hospital sufficiently prepared them to feed their child.
**Table 1: Demographics of participants**

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Number</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td><strong>Age of Child</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 to 5 months</td>
<td>4</td>
<td>6.78%</td>
</tr>
<tr>
<td>6 to 8 months</td>
<td>2</td>
<td>3.39%</td>
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<td>9 to 11 months</td>
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<tr>
<td>1 year</td>
<td>12</td>
<td>20.34%</td>
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<tr>
<td>2 years</td>
<td>20</td>
<td>33.90%</td>
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<tr>
<td>3 years</td>
<td>11</td>
<td>18.64%</td>
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<tr>
<td>4 years</td>
<td>9</td>
<td>15.25%</td>
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<tr>
<td><strong>Sex of child</strong></td>
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<td></td>
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<tr>
<td>Female</td>
<td>20</td>
<td>32.79%</td>
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<tr>
<td>Male</td>
<td>41</td>
<td>67.21%</td>
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<tr>
<td><strong>Sex of parent</strong></td>
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<tr>
<td>Male</td>
<td>5</td>
<td>8.20%</td>
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<tr>
<td>Female</td>
<td>56</td>
<td>91.80%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
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<tr>
<td>Bi-racial</td>
<td>1</td>
<td>1.64%</td>
</tr>
<tr>
<td>White</td>
<td>53</td>
<td>86.89%</td>
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<tr>
<td>Asian</td>
<td>5</td>
<td>8.20%</td>
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<tr>
<td>Native American</td>
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<td>3.28%</td>
</tr>
<tr>
<td><strong>State of Residence</strong></td>
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</tr>
<tr>
<td>OH</td>
<td>41</td>
<td>67.21%</td>
</tr>
<tr>
<td>KY</td>
<td>17</td>
<td>27.87%</td>
</tr>
<tr>
<td>IN</td>
<td>2</td>
<td>3.28%</td>
</tr>
<tr>
<td>TN</td>
<td>1</td>
<td>1.64%</td>
</tr>
<tr>
<td><strong>Type of Cleft</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleft lip only</td>
<td>22</td>
<td>36.07%</td>
</tr>
<tr>
<td>Cleft palate only</td>
<td>7</td>
<td>11.48%</td>
</tr>
<tr>
<td>CL and CP</td>
<td>32</td>
<td>52.46%</td>
</tr>
</tbody>
</table>
Parents who received feeding instructions within 12 hours after their child’s birth felt more adequately prepared to feed their child than those who did not ($\chi^2=8.19$, $p=0.0042$). (Figure 1) When parents received feeding instructions within 12 hours of their child’s birth they were 12 times more likely to feel that the staff of their birth hospital has adequately prepared them to feed their child (Odds Ratio=12.05, 1.9-76.9, 95% CI). At the birth hospital nurses, lactation consultants and members of the multidisciplinary team (usually nurses) were responsible for feeding instructions to 43 (70.5%), 23 (37.7%) and 6 (9.8%) parents respectively. (Figure 2) When the MT’s feeding education and instruction were provided within 12 hours of birth, parents were more likely to be satisfied ($\chi^2=6.22$, $p=0.013$).

Figure 1

**Time parents were given post-birth feeding instructions**

- **0 to 12 hours**: 43.48%
- **After 12 hours**: 32.60%
- **Not sure**: 8.70%
- **Prenatally**: 15.22%
Most parents, 46 (79.3%) reported using a special bottle or nipple to feed their child. Of those, 21 (45.7%) used a Haberman Feeder, 30 (65.2%) used a Mead-Johnson Cleft Palate Nurser, and 4 (8.7%) used a Pigeon feeding device. Twenty four parents (52.2%) reported that they received their bottles from the birth hospital, 19 (41.30%) from the MT, and 5 (10.9%) from a medical supply store. Parents reported that it was much more difficult to get these bottles from a medical supply store than from the birth hospital ($\chi^2=7.43$, p=0.0064) or the multidisciplinary team ($\chi^2=4.43$, p=0.035).

_Surgery Education_

Cleft lip repair is generally performed when the child is 2-3 months of age. The general rule is to perform the surgery when the child is 10 weeks of age, weighs 10 pounds and has achieved a
serum hemoglobin of 10mg/ml (Posnick and Ruiz, 2002). In this study, 30 children (57.7%) had their cleft lip closure between ages 2 and 3 months, 18 (34.62%) had their surgery between ages 4 and 6 months, and 4 children were repaired after 7 months of age. Surgeons were the individuals who educated parents about lip closure in 49 cases (90.7%). Nurses provided presurgical education to 18 parents (33.3%) and the team coordinator to 12 parents (22.2%). In this study the coordinators had backgrounds as dental hygienists and nurses. Almost all parents, 47 (94.0%), stated that their MT sufficiently prepared them for their child’s surgery. No parents were dissatisfied with the results of their child’s surgery or with their child’s facial appearance.

After the cleft lip surgery, families begin to prepare for the cleft palate closure. Of 39 children, 27 (69.2%) had their cleft palate closure by 10 months of age. Six (15.4%) had their surgery between 11 and 12 months of age. Six children (15.4%) were repaired after 13 months of age. Thirty-eight parents (97.4%) report they were educated about cleft palate surgery by the surgeon, 15 parents (38.5%) were educated by a nurse, 10 parents (25.6%) by the team coordinator. Again, a large majority of parents, 36 (94.7%) said that their MT sufficiently prepared them for their child’s surgery. Only 2 parents out of 39 that answered the question (5.1%) said that they were dissatisfied with the results of their child’s surgery.

Overall Satisfaction

When asked about their child’s medical care, 57 parents (93.4%) felt that their MT had met their needs. Only four parents (6.6%) said that it was difficult for them to talk to the specialists about their concerns. Fifty-six parents (91.8%) felt they were an active part of the healthcare team. However, 16 parents (26.2%) said that they would like to have been more involved in the
planning and decision making process. When asked “How satisfied are you with the level of care you and your child have received from the cleft palate/craniofacial team?,” 59 parents (96.7%) reported they were satisfied with the level of care they have received from their craniofacial team. Only 2 of 39 parents (5.1%) were dissatisfied.

Discussion

CLP has been reported to be the fourth most common birth defect (Edmondson et al. 1998). The reactions of parents who experience the birth of a newborn with CLP may not be well understood. Thus, we designed a retrospective cross sectional study to assess satisfaction of parents with a child with CLP to determine what factors might influence satisfaction. We found that although most parents were satisfied with the multidisciplinary teams, only half of the parents were satisfied with the birth hospital. Interestingly, this dissatisfaction could be attributed to feeding instruction being received 12 hours after the birth. Since 50% of parents were dissatisfied feeding education at the birth hospital, the causes and potential solutions for this problem needs to be addressed. Health professionals at birth hospitals usually have little experience feeding children with CLP. Johansson et al. (2004) state that nurses in the delivery/maternity ward had little knowledge of CLP and need further education. However, due to the high turnover rate of these nurses, MT’s may not be able to keep up with the need for this education and do not repeat education inservices as frequently as needed. Depending upon how many babies are delivered each year at a certain birth hospital, staff may only experience one or two babies born with a CLP over the span of a year. Therefore, feeding management competency of the staff at the birth hospital for a child with CLP depends on the staff’s exposure to children born with CLP.
Our finding that feeding management is a critical issue for parents of a child with CLP is supported by previous studies (Oliver et al., 1997; Young et al, 2001; Johansson et al., 2004). A study by Young et al. in 2001 identified the topic most important to families that had a child with CLP was feeding management. Specifically, 97% of the parents thought it was “critical” for the informer to discuss bottle feeding difficulties and 95% felt it was “critical” to have a demonstration of breast and bottle feeding (Young et al.). Oliver et al. (1997) stated that 95% of parents surveyed believed that there should be a healthcare worker who was specifically trained to give expert feeding help and advice at the birth hospital. One in 10 parents indicated that the response time for attending to the infant with CLP was too slow and they would have liked to try out the different bottles and nipples available (Oliver et al., 1997). The need for this feeding education has been strongly corroborated by our study, as the amount of time that elapsed between the child’s birth and parental feeding education strongly predicted parents’ satisfaction. Because a demonstration is so important to parents, and because some of the parents in this study have had difficulties obtaining special bottles or nipples from medical supply stores, it is recommended that birth hospitals and MTs have these bottles available for parents.

According to the American Cleft Palate-Craniofacial Association (ACPA) guidelines, MT’s should provide an educational program to birth hospital nurses and personnel about cleft feeding management (American Cleft Palate-Craniofacial Association, 1993). MT’s may need to provide nursing inservice education programs on cleft feeding to local birth hospitals on a regular basis or create a video or multimedia program for training birth hospital personnel. Our data strongly support the need to develop initial guidelines for birth hospitals for infants born
with CLP. Oliver et al. (1997) in their evaluation in South East Wales stated that postnatal visits need to occur sooner than they are and continuing education on basic feeding techniques for infants with CLP should be provided to maternity unit nurses and midwives. Another option for birth hospitals is to contact the nearest MT immediately after the birth of a child with CLP (before 12 hours), although this may not be practical for children born in hospitals located a great distance from a MT.

This study identified that the majority of cleft lip and cleft palate repair surgeries occur within the first year of life. This is concordant with the recommendations of the ACPA. Surgeons were the primary educators regarding cleft lip and cleft palate repair. Not surprisingly, nurses were reported to be the next most common educators of parents regarding cleft repair surgeries and lastly team coordinators.

According to the results of our study, the four MTs are providing satisfactory feeding and surgical education to parents and encouraging their involvement in their child’s management. Similar to British studies, most parents are satisfied with the care they receive from their craniofacial team (Jeffery et al., 2001; Noar et al., 1991; Sandy et al., 1998). We found a high percentage of parents were satisfied with their care, comparable to Jeffery et al.’s 2001 finding (96.7% vs. 96%, respectively). Similarly, 91.8% of parents in our study said that they were involved in the planning and decision making in their child’s care. This is about 10% more than Jeffery et al. (2001), in which only 82% of parents said that they were involved in the planning and decision making in their children’s care. Although 73.8% of parents felt that they had adequate involvement, 26.2% of our parents said they would like even more involvement in the
planning and decision making process. This is similar to the 30% of parents who wanted to be more involved in the planning and decision making process in the Jeffery et al. (2001) study. Four parents in our study (6.6%) said that it was difficult for them to talk to the specialists on the MT about their concerns compared to 11% of parents in the Jeffery et al. (2001) study. From this comparison, our data closely parallels that from other similar studies from a much different healthcare system. This reflects that our findings may be generalizable to other areas of the United States.

There are some limitations inherent to our study. As with any retrospective study, recall bias may be present in our results; however, this bias may not be as prevalent in this study since only parents with children between the ages of 3 months and 4 years were surveyed. These parents would have experienced their child’s feeding management and surgery education more recently than parents of older children. Finally, it is important to note that this study is a regional study, and these findings may not be generalizable to other areas of the country. However the consistency of our findings with other studies in the United States and the United Kingdom validates our results and allows us to apply them to populations outside this region.

In summary, parents of children with CLP are generally satisfied with the care they receive. However, appropriate feeding instruction within 12 hours of birth are critical. Therefore it is necessary to develop a strategy for providing appropriate feeding instructions to parents within the first 12 hours of birth. This may be best accomplished through a collaboration with the ACPA.
Bibliography


Appendix

Cleft Palate/Craniofacial Clinic Parent Survey

Instructions: Please take a few minutes to complete this survey and return it using the enclosed envelope. Your responses will aid medical professionals involved in Cleft Palate/Craniofacial clinics in better serving your family as well as other families. Circle the best response for each question below.

Only parents with children who have nonsyndromic cleft lip and cleft palate should be taking this survey. Please do not fill out this survey if you do not meet these criteria.

Section 1: Demographic Information

1. Please write the last 4-digits of your social security number on the lines: ____ ____ ____ ____
   (This number will be used to ensure that the study does not have duplicate responses and in no way will or can be used to locate or contact you)

2. My child’s age is:
   a. 3 to 5 months  b. 6 to 8 months  c. 9 to 11 months  d. 1 year
   e. 2 years       f. 3 years       g. 4 years

3. My child is:
   a. Female       b. Male

4. I (parent) am a:
   a. Female       b. Male

5. My child’s ethnicity can be described as: (Choose all that apply)
   e. Asian f. Pacific Islander g. Middle Eastern h. Other ____________

6. My child and I live in:
   a. Indiana b. Kentucky c. Ohio d. Other ____________

7. When did you first learn of your baby’s cleft lip and/or cleft palate?
   a. Prenatally b. At Birth c. Shortly After Birth
Section 2: Feeding Management

8. Who gave you initial cleft lip and palate feeding instructions?
   a. Birth hospital    b. Cleft Palate or Craniofacial Clinic
c. Other _______________

9. Did you meet with a lactation consultant after the birth of your child?
   a. Yes    b. No    c. Not Sure

10. Were you (or the mother) encouraged to have your baby nurse from your (her) breast?
    a. Yes    b. No

11. Was your baby admitted to the hospital for failure to thrive or dehydration?
    a. Yes    b. No

12. Was your baby’s formula or breast milk changed to help your baby gain weight?
    a. Yes    b. No

13. Did you use a special bottle or nipple to feed your baby?
    a. Yes    b. No (If No, skip to question 18)

14. What special bottle or nipple did you use? (Choose all that apply)
    a. Breast feeding    b. Haberman Feeder    c. Pigeon Feeding Aid
d. Mead-Johnson Cleft Palate Nurser
e. Not Sure    f. Other _______________

15. Within how many hours of life did you receive a special bottle and instructions?
    a. 0 to 6 hours    b. 7 to 12 hours    c. 13 to 18 hours    d. 19 to 24 hours
e. 24 to 48 hours    f. After 48 hours    g. Before birth    h. Not Sure

16. Where did you obtain these bottle or nipples?
    a. Pharmacy    b. Birth Hospital    c. Medical Supply Store
d. Cleft Palate or Craniofacial Clinic

17. Did you experience difficulty obtaining bottles or nipples?
    a. Great Difficulty    b. Some Difficulty    c. Little Difficulty    d. No Difficulty
18. Did the birth hospital sufficiently prepare you to feed your child?  
   a. Yes   b. No   c. Not Sure

19. Which professional(s) worked with you at the birth hospital? (Choose all that apply)  
   a. Occupational Therapist (OT)   b. Nurse   c. Cleft Palate/Craniofacial Team member   
   d. Lactation Consultant   e. Other ______________

20. Did the cleft palate/craniofacial team sufficiently prepare you to feed your child?  
   a. Yes   b. No   c. Not Sure

21. Did the cleft palate/craniofacial team meet you and your family’s feeding management needs?  
   a. Yes   b. No   c. Not Sure

22. How satisfied are you with the feeding management information and training you received from the cleft palate/craniofacial team?  

Section 3: Surgeries

23. Has your child had cleft lip surgery:  
   a. Yes   b. No  (If No, skip to question 31)

24. How old was your child at the time his/her cleft lip surgery?  
   a. 2 – 3 months   b. 4 – 6 months   c. 7 – 9 months   d. 10 – 12 months   
   e. Over 1 year of age   f. Not Sure

25. Who prepared you for your child’s cleft lip surgery? (Choose all that apply)  
   a. Nurse   b. Surgeon   c. Team Coordinator   d. Other______________

26. When were you told about the details of your child’s cleft lip surgery?  
   a. A few weeks before the surgery   b. Months before the surgery   
   c. A few days before the surgery
27. Did the cleft palate/craniofacial team sufficiently prepare you for the cleft lip surgery?
   a. Yes  b. No  c. Not Sure

28. Did the cleft palate/craniofacial team meet you and your family’s needs at the time of the surgery?
   a. Yes  b. No  c. Not Sure

29. How satisfied are you with the results of the surgery?

30. How satisfied are you with your child’s facial appearance?

31. Has your child had cleft palate surgery:
   a. Yes  b. No  (If No, skip to question 38)

32. How old was your child at the time his/her cleft palate was repaired?
   a. 9 - 10 months  b. 11 - 12 months  c. 13 - 14 months  d. 15 - 16 months  
   e. 17-18 months  f. 19 – 20 months  g. After 20 months of age  h. Not Sure

33. Who prepared you for your child’s cleft palate surgery? (Choose all that apply)
   a. Nurse  b. Surgeon  c. Team Coordinator  c. Other___________

34. When were you told about the details of your child’s cleft palate surgery?
   a. A few weeks before the surgery  b. Months before the surgery  c. A few days before the surgery

35. Did the cleft palate/craniofacial team sufficiently prepare you for the surgery?
   a. Yes  b. No  c. Not Sure

36. Did the cleft palate/craniofacial team meet you and your family’s needs at the time of the surgery?
   a. Yes  b. No  c. Not Sure

37. How satisfied are you with the results of the surgery?

38. Has your child had any of these other surgeries:
d. None of the Above e. Other __________________

39. Has your child had any of these dental appliances: **(Choose all that apply)**
   a. Feeding Palatal Appliance (a device that fits into the roof of the mouth, blocking the cleft opening and allowing easier suckling) 
   b. Latham Appliance (pinned palatal appliance surgically placed pre-lip repair to align segments) 
   c. NAM (naso-alveolar molding) 
   d. Bonnet 
   e. Surgical Taping 
   f. None of the above 
   g. Other ____________

**Section 4: Overall Team Satisfaction**

40. Has the cleft palate/craniofacial team met your needs?
   a. Yes b. No c. Not Sure

41. How easy have you found it to talk about your concerns with the specialists?

42. How involved do you feel you have been in planning and decision making of your child’s care?
   a. Very Involved b. Fairly Involved c. Slightly Involved d. Not Involved e. Not Sure

43. Would you like to be more or less involved in treatment/planning decisions?
   a. More Involved b. Same Amount of Involvement c. Less Involved d. Not Sure

44. How satisfied are you with the level of care you and your child have received from the cleft palate/craniofacial team?
Thank you for your participation.

Please put the survey in the self-addressed, postage-paid envelope for return.

If you have any questions or comments about this study please contact the principal investigator at the following address:

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Cincinnati Children's Hospital Medical Center
3333 Burnet Ave., E-5 ML4006
Cincinnati, OH 45229-3039

Phone: 513-636-5840
Email: Deanna.Hutchinson@cchmc.org

Parts of this survey were adapted from: