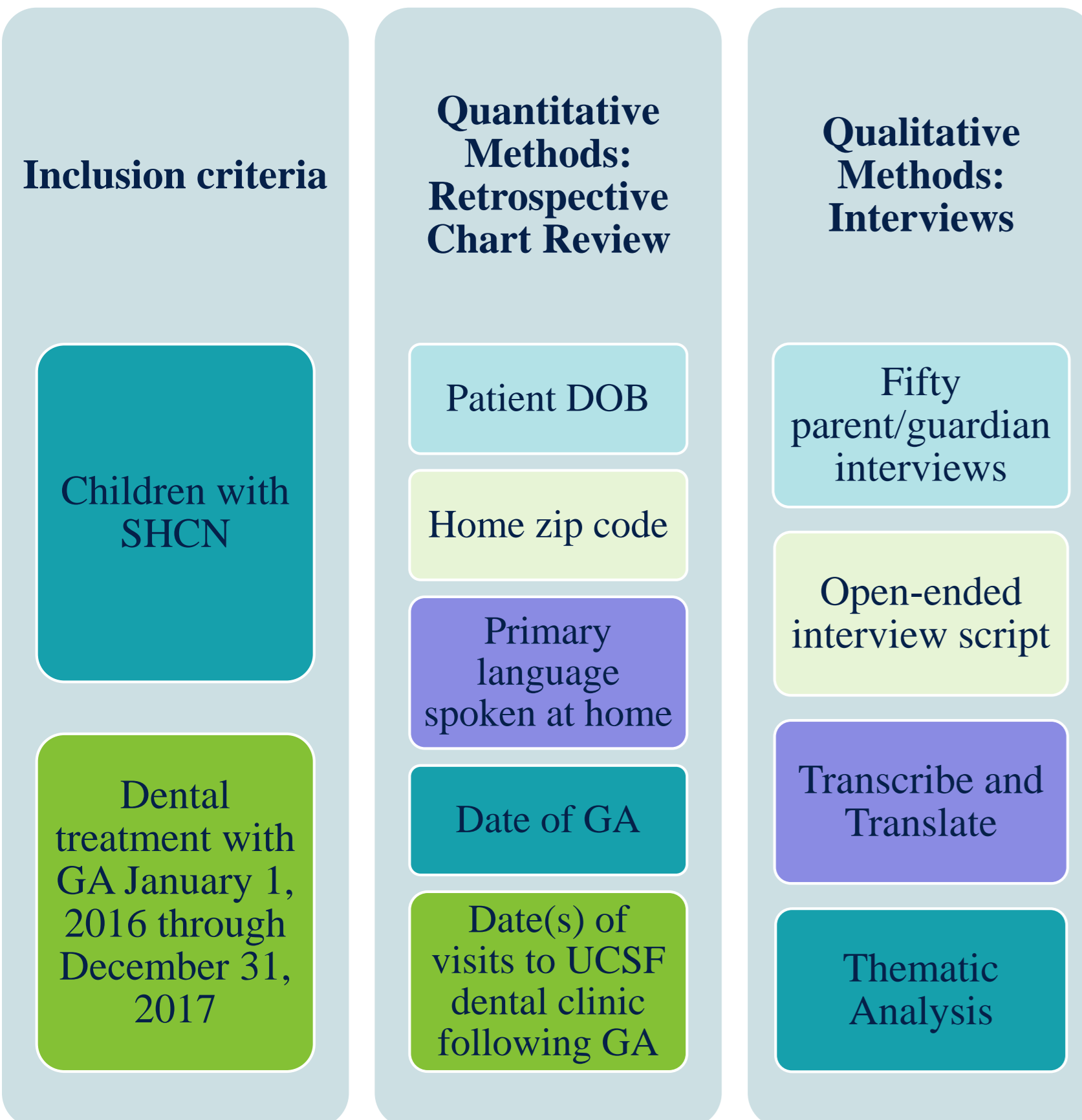


Barriers to Dental Care for Children with Special Healthcare Needs

Alain Flores DDS, Thomas Tanbonliong DDS, Ray Stewart DMD, MS, Christopher Foertsch MA, Erick Leyva, Jean Marie Calvo DDS, MPH
University of California, San Francisco Division of Pediatric Dentistry

Introduction

Children with special healthcare needs (SHCN), including physical, intellectual, and developmental disabilities, experience a disproportionate level of oral disease, and a decreased prevalence of having a dental home.^{i, ii, iii} Additionally, many children and adolescents with SHCN receive dental treatment with general anesthesia (GA). Greater than three-fourths of children with SHCN develop new caries within a year after treatment.^{vi} Children with SHCN who do not access routine dental care following treatment with GA, are four times as likely to require additional dental treatment with GA in the future.^{ix} The aim of this study was to identify barriers and enablers for the population of children with SHCN to receiving routine preventive dental care following dental treatment with GA.



Results

During the two year study period there were a total of 1,708 children treated with GA at UCSF pediatric dentistry. Of those cases, 498 (29.16%) were children with SHCN that met the inclusion criteria for this study. On average, families lived 65.8 (SD 55.75) miles from UCSF.

About two thirds of patients (66.4%) returned to UCSF for at least one dental visit of any kind after their dental treatment with GA. On average, patients did not return to UCSF for their first visit following treatment with GA until about 1.5 years (mean days 526.2, SD 409.43) after dental treatment with GA. On average, patients returned for dental visits at UCSF about every nine months following GA (sum of total visits during study period divided by total months in study period mean=8.9 (SD 9.22)).

Table 1. Patient Demographics and SHCN Domains		
	Chart Review Demographics (n=, percent)	Interview Demographics (n=, percent)
Demographics		
Age at Dental procedure with general anesthesia	8.6 (SD 6.6)	8.5 (SD 4.3)
Age at data collection for study	14.5 (SD 6.7)	14.2 (SD 4.4)
Primary Language Spoken at Home		
English	384 (77.11%)	42 (84.00%)
Spanish	70 (14.06%)	6 (12.00%)
Chinese (Cantonese and/or Mandarin)	7 (1.41%)	2 (4.00%)
Other	7 (1.41%)	-
Unknown	30 (6.02%)	-
SHCN Primary Indication for Dental Treatment under GA		
Autism/Neurodevelopmental Disorder	142 (28.51%)	15 (30.00%)
Genetic/Chromosomal Abnormality	98 (19.68%)	14 (28.00%)
Developmental Delay, Idiopathic	73 (14.66%)	7 (14.00%)
Cardiac Abnormality	63 (12.65%)	5 (10.00%)
Cerebral Palsy/Seizure Disorder	62 (12.45%)	7 (14.00%)
Cancer/Oncology	23 (4.26%)	-
Bleeding Disorder	10 (2.01%)	-
Skeletal/Connective Tissue Disorder	9 (1.81%)	1 (2.00%)
Non-Syndromic Craniofacial Anomaly	8 (1.61%)	-
Other	8 (1.61%)	1 (2.00%)
Dental Anomaly (i.e. amelogenesis imperfect, dentinogenesis imperfecta)	2 (0.40%)	-

“But I just felt like when they [a dentist] see a special needs child or you tell them, “Oh, my son has autism,” I just felt like they didn’t even try. The doctor we had gone to initially wouldn’t even look at him, wouldn’t even try. He walked in the room and he saw that my son was upset and he was like, “Well, we can’t do anything. He needs to be sedated. I won’t even attempt”” (interviewee 7)

Interview quotes about barriers to dental care

“If I do have to make an appointment, it has to be two hours [away]. So I’m kind of hoping like, ‘Oh, okay. Maybe the swelling or the redness will go down.’ Instead of calling the dentist right away. I feel like if it was closer, I might be more prompt to get an appointment for him to just be checked out. But because it’s that drive, I hold off on taking him.” (interviewee 38)

“But what we’ve done is we’ve come enough and had the same dentist over and over, calm demeanor and desensitized him. So now he’ll go in without crying and he’ll sit in the chair. He doesn’t like the glasses or the bib they put on, but they always turn on his favorite show on the TV and they angle it so he can see. They go slow and tell them everything they’re doing. And now he will hold his mouth open and let them check or brush or floss.” (Interviewee 13)

Interview quotes about enablers to dental care

“I was trying to find on the internet, Google, but nobody described anything about special needs appointments. The only thing that worked was by word of mouth with parents. I think it was at a support for families event where we met together and we discussed, “Oh, we have the same problem of where to go.” And one of the parents mentioned, “Okay, you can try UCSF because they know what to do with special needs.” (Interviewee 2)

Table 2. Key Barrier and Enabler Themes Identified Through Qualitative Interviews	
Key Barrier Themes Identified	Key Enabler Themes Identified
Child stress/anxiety	Effective behavior management
Finding an accepting provider	Continuity of provider/care
Provider rapport: Dismissive	Provider rapport: Positive attitude
Proximity of provider/Transportation	Referral to an accepting provider

Conclusion

- Children with SHCN do not routinely return for routine, follow up and preventive dental visits following dental treatment with GA.
- Children with SHCN face barriers when trying to access routine dental care. Child stress/anxiety, finding an accepting provider, dismissive providers, and the proximity of provider contribute to challenges in children with SHCN obtaining dental care.
- Effective behavior management, continuity of provider/care, positive provider attitude, and referrals to an accepting provider can help enable children with SHCN to obtain routine dental care

Acknowledgements & Funding: Thank you to Dr. George Taylor, DMD, MPH, DrPH and Dr. Kristin Hoelt, PhD, MPH for their contribution to the formulation of study design. This study was supported by the University of California San Francisco Population Health and Health Equity Scholars pilot award. This project was also supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS).

References i) Data Source: Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children’s Health. Accessed at <http://www.childhealthdata.org/learn/NS-CSHCN>. As cited in Children with Special Health Care Needs: A Profile of Key Issues in California, Lucile Packard Foundation for Children’s Health. (Oct. 2010).
ii) Van Dyck, P. C., Kogan, M. D., McPherson, M. G., Weissman, G. R., & Newacheck, P. W. (2004). Prevalence and characteristics of children with special health care needs. Archives of pediatrics & adolescent medicine, 158(9), 884-890.
iii) Guideline on Caries-risk Assessment and Management for Infants, Children, and Adolescents. Am Acad Pediatr Dent, 37, 132-9.
vi) Craig, M. H., Scott, J. M., Slayton, R. L., Walker, A. L., & Chi, D. L. (2019). Preventive dental care use for children with special health care needs in Washington’s Access to Baby and Child Dentistry program. The Journal of the American Dental Association, 150(1), 42-48.
ix) Fontana, M., & Zero, D. T. (2006). Assessing patients’ caries risk. The Journal of the American Dental Association, 137(9), 1231-1239. 15
xi) American Academy of Pediatric Dentistry. Management of dental patients with special health care needs. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2022:302-9.