

## Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

\_\_\_\_\_  
Vanessa Sandoval

\_\_\_\_\_  
Date

BRECHAS: Grant proposal to develop a telehealth school-based program to educate Hispanic parents regarding oral health in Cox, Stringfellow, Okapilco and Sunset Elementary Schools in rural Georgia.

By

Vanessa Sandoval  
Degree to be awarded: M.P.H

Prevention Science

---

David Westfall, M.D, M.P.H  
Committee Chair

---

Jorge Bernal, M.P.H  
Committee Member

BRECHAS: Grant proposal to develop a telehealth school-based program to educate Hispanic parents regarding oral health in Cox, Stringfellow, Okapilco and Sunset Elementary Schools in rural Georgia.

By

Vanessa Sandoval

B.S. Biotechnology  
Kennesaw State University  
2010

Thesis Committee Chair: David Westfall, M.D, M.P.H

An abstract of  
A thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
in partial fulfillment of the requirements for the degree of  
Master of Public Health  
in Prevention Science  
2018

## **Abstract**

BRECHAS: Grant proposal to develop a telehealth school-based program to educate Hispanic parents regarding oral health in Cox, Stringfellow, Okapilco and Sunset Elementary Schools in rural Georgia.

By Vanessa Sandoval

Disparities in both oral health disease and lack of oral health education continue to affect a large segment of Georgia's population. Evidence shows a current lack of accessibility to oral health care education for Hispanic residents of rural counties of Georgia. Despite existing prevention initiatives and interventions, tooth decay among children continues to be one of the most common chronic diseases in the state of Georgia. Hispanic children and children in rural areas have significantly higher prevalence of tooth decay (64% and 60% respectively), compared to non-Hispanic children and children in urban areas (50% and 48% respectively). Evidence shows a current gap in availability of oral healthcare and related education for rural communities, especially the Hispanic community in Colquitt County. A major component that is impeding the access of the current oral health initiatives is lack of oral health education. Education has the ability to impact oral health throughout the community. It brings a clear perspective and clarity specifically when it comes to underserved populations.

Colquitt County, GA has an unmet need for oral health education. There is a disconnect in the understanding of the benefits of oral health and sealants in the Hispanic community, specifically for the parents of elementary school children. In response to the Health Resources and Services Administration (HRSA), Federal Office of Rural Health Policy (FORHP) Telehealth Network Grant Program (TNGP), the BRECHAS pilot program plans to provide oral health education in Spanish through telehealth technology to four elementary schools in Colquitt County. This will help to close the knowledge gap and remove access barriers. Through the BRECHAS program Hispanic parents will gain an understanding of the importance of oral health, therefore helping to reduce oral health disparities among school children in Colquitt County.

BRECHAS: Grant proposal to develop a telehealth school-based program to educate Hispanic parents regarding oral health in Cox, Stringfellow, Okapilco and Sunset Elementary Schools in rural Georgia

By

Vanessa Sandoval

B.S. Biotechnology  
Kennesaw State University  
2010

Thesis Committee Chair: David Westfall, M.D, M.P.H

A thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
in partial fulfillment of the requirements for the degree of  
Master of Public Health in Prevention Science  
2018

# Acknowledgments

I want to first give all the glory to God, for always giving me strength and peace throughout this program. I want to thank Him for always providing for me during this process. I want to thank my parents (Fernando and Annie Sandoval) for their unconditional love and support over the past three years. I could not have completed this program without their prayers and encouragement. Papi thank you for always pushing me to be better.

I want to thank my family, church family and friends for their constant support, prayers and understanding.

Many thanks to my mentor and friend Tameca Brooks. Tameca's guidance and instruction was crucial for my success in this program. I am deeply grateful for her support, encouragement and kindness.

I want to thank my EMPH family (Megan, Sagar, Annie, Leslie, Jenn) for always being there helping me to navigate each class and project. You guys are gifts from God.

I want to thank my employer IST (Sydney and Jake), for allowing me to further my education. Thank you for all your support.

I want to thank my Chair Dr. Westfall and Field advisor Jorge Bernal for their support during this thesis process.

## Table of Contents

Chapter 1: Introduction.....	1
Chapter 2: Literature Review.....	6
Introduction.....	6
Chapter 3: Methods.....	14
Funding Agency - The Health Resources and Services Administration .....	14
Grant Review Process .....	16
Chapter 4: Incorporation of Reviewer Comments .....	21
Reviewer 4 comments: Dr. Leslie Dickman.....	24
Reviewer 5 comments: Annie Scott .....	26
Chapter 5: Proposal .....	29
Project Abstract .....	29
Funding Preferences .....	29
Needs, Objectives and Projected Outcomes .....	29
Service Area .....	30
School Based Health Centers (SBHC).....	30
Clinical Services to Be Provided .....	32
Actual Parents/ Persons Served .....	32
Self-Assessment .....	32
Outcomes – Telehealth Services.....	33
Sustainability .....	34
Facilities .....	50
Work Plan .....	51
Resolution of Challenges.....	51
Evaluation Plan.....	53
Organizational Information.....	55
Funding Requested .....	57
Budget .....	57
Attachments .....	60
Attachment 1: Rural ID Eligibility.....	60
Attachment 2: Work Plan.....	61
Attachment 4: Organizational Chart.....	64
Attachment 5: Letter of Support .....	65
.....	65
Appendices .....	66
Appendix 1: Focus Group Questions .....	66
Appendix 2: Consent Form – Videoconference (Translated to Spanish).....	68

<b>Appendix 4: Consent Form Focus Groups (Translated to Spanish)</b> .....	69
<b>Appendix 5: Baseline Survey</b> .....	70
<b>Appendix 6: Post-Survey</b> .....	71
.....	71
<b>Appendix 7: Pamphlets (In Spanish)</b> .....	71
.....	71
<b>Reference page</b> .....	72



# Chapter 1: Introduction

## Introduction and Rationale

Oral health diseases such as tooth decay, although preventable, continue to be one of the nation's leading chronic health problems for children. Research shows that approximately 23% of children ages 2 to 11 years have had at least one primary tooth with untreated decay in the United States (Griffin et al., 2014). These rates are much higher for Black and Hispanic children (NIH, 2017). Untreated decay can cause devastating effects in children including problems with speech, learning and eating affecting their health and development (Griffin et al., 2014). In addition, it has been estimated that 51.7 million school hours have been missed annually by school-aged children due to dental problems. Approximately 20 billion dollars have been associated with the total dental expenses for U.S. children aged 5 to 17 years (Griffin et al., 2014).

Locally, disparities in both oral health disease and access to dental services continue to affect a large segment of Georgia's population. Hispanics, non-Hispanic blacks, residents of rural areas, and persons with low socioeconomic status tend to be more affected by oral health problems and face more barriers to access dental services (Kabore et al., 2014). This includes children in rural areas of Georgia, who are currently at risk for dental decay. According to the "The Burden of Oral Health in Georgia" report, "young children from Georgia rural areas were more likely to have untreated dental decay (29%) than children from small cities (18%)" (Kabore et al., 2014). Due to these facts, the Georgia Department of Public Health developed The Georgia Dental Sealant Program (GSDP).

The Georgia Dental Sealant program is a school-based program designed to prevent tooth decay in elementary school children by providing eligible students with dental sealants on their first and second permanent molars along with oral health care education (GDPH, 2017). This program targets specifically schools with at least 50% of their students participating in the Federal Free-and-

Reduced Lunch Program (ASTDD, 2014). Parental permission is required in all participating schools to provide second graders with a screening, sealants when appropriate, and fluoride varnish (ASTDD, 2014). Currently, there are 60 school-based sealant programs within 9 districts of Georgia, including some rural areas (GDPH, 2017). Although the program has been shown to have many benefits, some barriers have been identified which can hinder ongoing success of the program. For instance, it has been shown that one of the major barriers currently impeding success for program is obtaining parental consent (Seal America, n.d.). Parental consent is critical for the sustainability of the program as well as the advancement. Some of the reasons explaining why parents may choose not to sign the consent forms include: the consent form and fact sheet may not be written in simple language or their native language; the consent form may be too long; the methods of how the sealant-program actually works and how it could impact their time is not described clearly; and lastly, there may be a stigma associated with receiving free dental care (Seal America, n.d.). Hispanic parents may not fully comprehend the purpose for sealants, therefore not granting their children permission to receive the sealants. Some of these Hispanic parents reside in rural Georgia communities which may lack access to dental services or oral health care education.

A major component to overcoming the current lack of access to oral health education is to implement an intervention within federally designated counties of Georgia, including rural areas. An evidence-based approach for targeting these counties would be the use of telehealth (Dinesen et al., 2016). Telehealth utilizes a variety of methods to administer virtual medical, health, and education services, which can lead to further enhancement of care and education delivery for many different communities (Center for Connected Health Policy, n.d.). Telehealth is actively being used to increase health access to rural communities across the nation. In response to the Health Resources and Services Administration (HRSA), Federal Office of Rural Health Policy (FORHP) Telehealth Network Grant Program (TNGP), this current project proposal will aim to conduct

various meetings using telehealth to provide oral health care education to Spanish-speaking parents in five rural elementary schools throughout the state of Georgia.

## **Problem Statement**

Evidence shows a current lack of accessibility to oral health care education for Hispanic residents of rural counties of GA. Despite existing prevention initiatives and interventions, tooth decay among children continues to be one of the most common chronic diseases in the state of Georgia. Hispanic children and children in rural areas have significantly higher prevalence of tooth decay (64% and 60% respectively), compared to non-Hispanic children and children in urban areas (50% and 48% respectively). Evidence shows a current gap in availability of oral health care and related education for rural communities, especially the Hispanic community.

## **Purpose Statement**

Education has the ability to impact oral health throughout the community. It brings a clear perspective and clarity specifically when it comes to underserved populations. The purpose of this grant is to educate parents of Cox, Stringfellow, Okapilco and Sunset Elementary school children regarding dental sealants utilizing telehealth in rural Colquitt County, Georgia with a high Hispanic population.

Objectives to be answered by the Grant Proposal:

- If funded, BRECHAS will provide oral health education to Cox, Stringfellow, Okapilco and Sunset Elementary school parents.
- Increase the number of sealant consent forms signed by Hispanic parents at Cox, Stringfellow, Okapilco and Sunset Elementary schools.
- Increase the number of Hispanic children being served in the GDSP at Cox, Stringfellow, Okapilco and Sunset Elementary schools.

## Significance Statement

Closing the gap for Hispanic parents in rural Georgia by educating them regarding dental sealants will not only benefit the overall health of the children that are falling through the cracks with the current intervention but it will make sure that the current sealant program is reaching its full potential. Hispanic rural children in Georgia are not able to get all of the benefits from The Georgia Dental Sealant Program if their parents do not sign the release form. A school-based telehealth program can be an effective way to provide the proper oral health education their parents need to be able to fully understand the impact this will make in their children's health. These parents will be provided with a safe place to be educated about the issue and to ask questions in their own language.

## List of Terms

Hispanics- Hispanic origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person's parents or ancestors before arriving in the United States. People who identify as Hispanic, Latino, or Spanish may be any race.

BRECHAS- This is a term in Spanish that means gaps.

Tooth decay - Tooth decay is the destruction of your tooth enamel, the hard, outer layer of your teeth. It can be a problem for children, teens and adults

Cavity - A cavity is a very small hole that forms on the surface of a tooth.

Dental sealant - Dental sealants are plastic coatings that are usually placed on the chewing (occlusal) surface of the permanent back teeth — the molars and premolars — to help protect them from decay.

Rural area – means all counties that are not designated as parts of Metropolitan Areas (MAs) by the Office of Management and Budget (OMB). In addition, OAT uses the Rural Urban Commuting Area Codes (RUCAs), developed by the WWAMI Rural Research Center at the University of

Washington and the Department of Agriculture's Economic Research Service, to designate "Rural" areas within MAs.

Oral health diseases – Oral diseases range from cavities to cancer

Elementary school- a school that provides the first part of a child's education, usually for children between five and eleven years old.

Social Economic Status - Socioeconomic status is the social standing or class of an individual or group. It is often measured as a combination of education, income and occupation.

# Chapter 2: Literature Review

## Introduction

Health literacy regarding oral health and sealant prevalence greatly affects minority communities in the United States. Currently, there is disparity in regards to sealant usage and oral health education affecting minority low-income individuals. The BRECHAS grant proposal (Chapter 5), presents a clear initiative to aid communities to close the current literacy gap.

What is oral health? According to the World Health Organization (WHO),” oral health is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual’s capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing”(WHO, n.d.). As the years have passed, the definition of oral health has evolved into an integral description that goes beyond the absence of disease (Figure 1). The new definition focuses more on the individual, highlighting physical and social environments which impact major health determinants (Glick et al, 2016). This ties oral health to quality of life rather than just focusing on disease. According to the FDI World Dental Federation (2016):

Figure 1: Oral Health Definition

Oral health is multifaceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow, and convey a range of emotions through facial expressions with confidence and without pain, discomfort, and disease of the craniofacial complex.
Further attributes of oral health:
- It is a fundamental component of health and physical and mental well-being. It exists along a continuum influenced by the values and attitudes of people and communities.
- It reflects the physiological, social, and psychological attributes that are essential to the quality of life.

- It is influenced by the person's changing experiences, perceptions, expectations, and ability to adapt to circumstances.

Source: FDI World Dental Federation

As dental and public health professionals continue to create new interventions to reduce tooth decay, sealants have been recognized to be one of the most effective ways to prevent tooth decay. According to the Centers for Disease Control and Prevention, studies on sealant effectiveness have demonstrated that sealants “delivered in clinical or school settings prevent about 81% of decay at two years after placement, 50% at four years and can continue to be effective for up to 9 years through adolescence” (Griffin et al, 2016). Increasing sealant prevalence has become a national health goal.

As reflected in the relevant studies within this literature review, community assessments suggest that increasing the proportion of sealants placed among children of low-income families could potentially reduce tooth decay. Socio-economic and racial/ethnic disparities continue to impact the progress in some areas. Although sealant interventions are rapidly growing across the nation there are still several obstacles for some communities. Health literacy and language barriers are some of the main factors affecting the Hispanic community in regards to sealant access. The Hispanic parents' ability to comprehend the material in their own language has been a challenge.

## **Methodology**

Medline, PubMed and Google Scholar were some of the electronic databases used to search relevant articles and journal publications. Initial searches included a combination of the following words: Hispanic, rural, sealants, education, access. In addition, resources were obtained from the Oral Health Division at the Centers for Disease Control and Prevention (CDC).

## Relevant Studies

**Agili and Griffin (2015).** This study examined the effects of family income in regards to parental education and sealants. The authors combined data from the National Health and Nutrition Examination Survey (NHANES), including the 2005-2006, 2007-2008, and 2009-2010 cycles. The study included a total of 7,090 participants ranging from ages 6 to 19 years old. Predisposing and enabling variables were identified for this study. Their predisposed variables were child's age, sex, race/ethnicity, and parental education. However, family income, health insurance status, regular source of medical care, and future need for care were the enabled variables. Agili and Griffin found that parents with an education level beyond high school were 50% more likely to have children with higher sealant frequency. The study results showed that sealant prevalence increased depending on factors such as parent's education and family income. Older non-Hispanic children had higher percentages of sealants placed compared to younger children. The findings suggest that income does alter the relationship between parental education and sealant placement among children.

**Mejia et al (2010).** The relationship between language, literacy and lack of sealants in children was analyzed in this study. The authors reviewed data from the 2005-2005 California Oral Health Needs Assessment. The sample contained 10,450 children from 182 randomly selected public elementary schools in California. Information on oral health indicators including sealant use was gathered from dental health screenings performed by qualified dental professionals. Socio-demographic information was obtained by an additional take home survey. The absence of sealants in a child's first permanent molars was used as the dependent variable. For the independent variable, a child's race/ethnicity and socio-economic position were used. This was measured by the child's participation in the free or reduced-price lunch program. In addition, acculturation and parent functional health literacy were also included as independent variables. Low parental health and English literacy are some of the barriers in overcoming underutilization of sealants. Making sure that



parents and patients understand the sealant consent and health history forms will be crucial for closing the gap. Additionally, one identified way to check their understanding is by checking if there are any skip patterns.

**Griffin et al (2016).** Dental sealant use and untreated tooth decay were studied among U.S school-aged children. Data from the 1999-2004 and 2011-2014 NHANES cycles were combined to estimate sealant use and untreated decay in U.S children ages 6-11. The authors stress that the use of sealants could really reduce tooth decay among low-income children. Sealants are beneficial because they last up to 9 years, potentially protecting adolescents and young adults from untreated tooth decay.

For this study, the authors classified sealant use by the presence of at least one sealed permanent molar in a child's mouth. On the other hand, untreated decay was classified as at least one untreated permanent tooth with decay. Griffin et al found that nearly 43% of children ages 6-11 years had a least one dental sealant. Furthermore, sealant usage for low-income children was lower than high income children with 38.7% and 47.8% respectively. Non-Hispanic white children (46%) with parents with post-secondary education (45.2%) had higher sealant prevalence compared to non-Hispanic black children (32.2%), as well as, children with parents with only a secondary education (37.7%). Some of the factors that were considered in this study eclipsed other studies mentioned above, which include: Race/ethnicity, sex, family income and highest level of education.

**Cao et al (2017).** Disparities in preventive care among children in Georgia were examined. Low-income children eligible for public dental insurance were compared to children with private dental insurance and/or parents with high income. Multiple sources of data were used, including US Census and Georgia board of Dentistry, to estimate measures of preventive dental care access for children ages 0 to 18 years in the year 2015. Among the factors that were considered were one-way traveled distance to the dentist, percentages of met need, and scarcity of dentists. In addition,

quantifying disparities and access were estimated using an optimization model. The results showed that approximately 1.5 million children were eligible for public insurance and 600,000 children had private insurance. The average need met was 59% for low-income children and 96% for high income children. Furthermore, these numbers were even lower for rural areas with 33% for low-income families and 84% for high income families. The one-way travel for families to access the nearest dentist was 17.2 miles for low income families and 3.7 miles for high income families. In rural areas one-way travel to access the dentist was 11.6 miles for children with private insurance and 32.9 miles for children with public insurance. Cao et al, suggest that increasing dentist participation in public insurance could potentially lower the one-way travel for publicly insured children from 40 to 25 miles in rural areas and from 12 to 10 miles in urban areas. The authors concluded across the board that high-income children had better access to preventive dental care compared to low-income children. Identifying these disparities and targeting them could really benefit allocation of dental resources.

**Dye et al (2017).** This study examined various trends in dental caries among children in the US, according to the poverty status. Data from 1999-2004 and 2011-2014 from the NHANES cycles was used. Results showed that although prevalence of decay decreased between the cycles for younger children, prevalence in adolescents continues to be unchanged. This shows that some of the current oral health interventions, such as sealants, are being effective.

**Glassman et al (2012).** An overview of telehealth and how it improves oral health for vulnerable populations was provided through this study. Telehealth is defined as the use of technology to provide health care at a distance. This is a cost effective way of providing care for hard to reach populations. Apple Tree Dental and the California Virtual Home Project are two examples of teledentistry programs. These two programs use telehealth to access vulnerable populations such as low-income daycares, people with disabilities and the elderly. Glassman et al

suggest that to fully tap into the true potential of telehealth to impact vulnerable populations, policy and delivery system reforms are needed. This will allow for teams to work together to ensure that vulnerable populations have access to the oral health care they need by widening the resources.

**Cao et al (2015).** This study estimated the supply and demand for pediatric preventive dental care and identified shortages in Georgia. Studies have shown that by the year 2025, demand for dental care is expected to surpass the supply. The authors used logistic regression analysis to estimate the risk for caries for approximately 2.5 million children in Georgia, ages 0-18 in the year 2010. For this study, demand was estimated by using the time needed to provide recommended dental procedures. Supply was estimated by the provider's location and availability to provide preventive services. Shortage areas were determined by examining the difference between demand and supply. Results showed that in 2015, out of 2,489,727 children in Georgia, approximately 349,060 were at high risk for dental decay. The estimated total for the demand for preventive dental care in Georgia was 2.7 million hours. There were 41 rural counties identified as shortage areas. 21 of these counties had no pediatric preventive dental care supply hours, due to no available dentists in the area. Cao et al's, findings suggest that there is a poor distribution regarding pediatric dental care in Georgia. This study shows that the demand was more than double the supply in 41 counties, even though the overall supply in the state exceeded the demand. Some of the strategies proposed by the authors are implementation of dental sealant school-programs, increasing the current provision of fluoride varnish at primary care provider's offices, and allowing dental hygienists to provide preventive dental care without supervision from a dental provider.

**Children's Dental Sealant Project (2014).** This dental project examines various issues impacting the delivery of state and local school-based sealant programs. School-based dental sealant delivery programs are described as evidence-based public health strategies to target and prevent tooth decay among vulnerable school-aged children. Studies have shown that sealants, protective

coatings on children's teeth, have reduced tooth decay by 60 %. This report examined long lasting school sealant programs in five states including: IL, NY, OH, SC and HI. Data from this report was collected between 2011 and 2013 from state surveys, interviews and case-studies. This report suggests that providing sealants through a school based program is one of the most cost effective ways to prevent tooth decay. By expanding the effectiveness and resources of sealant school-based programs, state agencies and their partners could potentially prevent most common caries in permanent teeth of school-aged children.

### **Additional Studies**

**Renee (2011).** High cost of care and the inaccessibility to providers has caused a lack of access to basic preventive dental care services for US citizens. Michigan, as in the rest of the nation, has racial disparities in oral health. Generally, the populations with the poorest oral health include Hispanics, non-Hispanic Blacks and American Indians.

**Dye et al (2015).** As reported by other studies, dental caries was more predominant in Hispanic and non-Hispanic Black children ages 2-8. Double the rates of untreated tooth decay were also found in Hispanic and Non- Hispanic Black populations as compared to non-Hispanic white.

### **Chapter Summary**

A major obstacle in providing preventable dental care, especially in rural areas where dental shortages are more evident, is low levels of health literacy and English as a second language. Low levels of health literacy result in parents misinterpreting or missing important information regarding oral health, thus missing the opportunity to fully comprehend school-based programs and how these could truly help their children. These programs usually have consent forms and pamphlets, which they may not be able to understand. An evidence-based approach for targeting these rural counties could be the use of telehealth. Telehealth is actively being used to increase health access to rural communities across the nation. This current project proposal BRECHAS will aim to conduct

various meetings using telehealth to provide oral health care education to Spanish-speaking parents in Colquitt County to increase their oral health knowledge.

# Chapter 3: Methods

## Funding Agency - The Health Resources and Services Administration

The Health Resources and Services Administration (HRSA) is an agency of the U.S. Department of Health and Human Services, which primarily targets people who are geographically isolated or economically or medically vulnerable, in order to improve their health care. This includes those in need of high quality primary health care, people living with HIV/AIDS, pregnant women, and mothers. HRSA's main mission is *"To improve health and achieve health equity through access to quality services, a skilled health workforce and innovative programs"* (HRSA, 2018). Currently, as of Fiscal Year 2018, HRSA has 11.5 Billion dollars available for funding. The main goals for this agency are as follow:

**Goal 1:** Improve Access to Quality Care and Services

**Goal 2:** Strengthen the Health Workforce

**Goal 3:** Build Healthy Communities

**Goal 4:** Improve Health Equity

**Goal 5:** Strengthen HRSA Program Management and Operations

HRSA was chosen specifically for this pilot program because of the correlation of the grant's focus to provide health access (including education) to rural areas using telehealth and School Based Health Centers (SBHC). Additionally, goals 1 and 3 are closely related with the mission of BRECHAS to provide access to oral health education using telehealth in order to build healthy communities.

Other funding agencies that sponsor grants related to oral health and rural areas include Wrigley Company Foundation, DentaQuest Executive Director's Fund and the Centers for Disease Control and Prevention (CDC), to mention a few. These agencies support organizations, events, and activities that promote oral health with a focus on reducing oral health disparities and advancing health equality in underserved communities.

## **Grant Announcement**

The grant announcement targets telehealth programs and networks that can improve access to quality health care services in rural and underserved communities. These programs will expand access, improve and expand the training of healthcare providers, and/or expand and improve the quality of health information available to healthcare providers, and patients and their families, for decision-making. The clinical focus will be to provide telehealth services for rural children that focus on asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health. This program will provide approximately \$6,000,000 per year to up to twenty recipients during the federal fiscal years 2016 – 2019. Per year, applicants may apply for a ceiling amount of up to \$300,000. The work is to be done by two of the following entities: school-based health centers; community health centers or other federally qualified health centers; health care providers, including pharmacists, in private practice; entities operating clinics, including rural health clinics; local health departments; non-profit hospitals, including community access hospitals; other publicly funded health or social service agencies; and long-term care providers. The complete grant announcement can be found at: [HRSA-16-012](#)

## Grant Review Process

A draft of the grant proposal was provided to the reviewers individually on October 1<sup>st</sup>, 2018. They were given up to two weeks to review the grant, and provide feedback. Grant reviewers were provided with the EMPH reviewer template and the full HRSA grant. All reviewers were instructed to utilize the reviewer template as a guide for their review, as well as making direct comments to the document regarding feasibility and improvements. All comments were analyzed by the student to be utilized as constructive feedback for the final draft of the proposal. Comments were included in chapter four of this thesis. The ten questions on the EMPH reviewer template include:

*1. Please state your level of agreement/disagreement with the following statement:*

*The submission is responsive to the call for proposals.*

a. Strongly agree b. Agree c. Neither Agree nor Disagree d. Disagree e. strongly disagree

*2. How could the submission have been more responsive to the call for proposals?*

*3. Please state your level of agreement/disagreement with the following statement:*

*The proposal is well thought out and theoretically sound.*

a. Strongly agree b. Agree c. Neither Agree nor Disagree d. Disagree e. Strongly disagree

*4. What improvements could be made to the theory and structure of the proposal?*

*5. Please state your level of agreement/disagreement with the following statement:*

*The PI makes a compelling case that the proposed research/project/program is necessary.*

a. Strongly agree b. Agree c. Neither Agree nor Disagree d. Disagree e. Strongly disagree

*6. What would have improved the argument that the proposed activities are necessary?*



*7. Please state your level of agreement/disagreement with the following statement:  
The PI makes a compelling case that the research team will be able to accomplish  
the proposed activities with the resources and time allocated.*

a. Strongly agree b. Agree c. Neither Agree nor Disagree d. Disagree e. Strongly disagree

*8. What changes would improve the perceived feasibility of the proposed activities?*

*9. Please state your level of agreement/disagreement with the following statement:  
The proposed work is innovative and sets the groundwork for future work in this  
area.*

a. Strongly agree b. Agree c. Neither Agree nor Disagree d. Disagree e. Strongly disagree

*10. What additional comments and suggestions do you have for the PI?*

Once the EMPH reviewer template was received, including the comments, a thank you email expressing gratitude for their time and feedback was sent to each reviewer. The information from each review form will be analyzed in the following steps:

1. Multiple choice questions will be totaled to examine the number of each answer category - strongly agree, agree, disagree and strongly disagree.
2. For the open-ended questions, general themes will be analyzed to make changes on the final document where appropriate.
3. Individual comments on the document will be considered and analyzed to decide if they fit the overall mission for the pilot program.
4. After addressing all of the feedback, comments will be added to the final draft of the proposal before the final version is submitted.

## **Grant Reviewers**

A total of five grant reviewers were chosen to review and provide feedback on this proposal. Reviewers were chosen based on their expertise in the field of oral health, grant writing, health promotion and public health community initiatives.

### **1. David Westfall, MD, MPH**

Dr. Westfall is a retired family medicine doctor from the University of Florida with a passion for helping people. Currently, Dr. Westfall is a professor for the Rollins School of Public Health Executive MPH program and teaches "Planning and Performance Measures for Non-profits", as well as serving on thesis committees. He is a Rollins School of Public Health graduate and served as the District Public Health Director for District 2 at the Georgia Department of Public Health. In that role he was responsible for promoting and improving public health in 13 counties in north Georgia. Some specific accomplishments include increasing primary care services for HIV patients in the district's Ryan White Clinic, improving access to health care, and improving employee development for district staff. In addition, he has been a board member for various organizations that help meet the needs of people who are uninsured and medically underserved. He was a founding physician of the Good News Clinics (GNC), which provides medical and dental care at no cost to low-income, uninsured residents of Hall County.

### **2. Jorge Bernal, DDS, MPH**

Jorge Bernal has been employed by the Georgia Department of Public Health (DPH) since December 2009. He has over 10 years of experience in dentistry and community health. After dental school, he spent four years working as a dentist in Colombia, South America, in the remote areas of the Amazon forest. He was able to perform comprehensive dental care as well as promotion and prevention on a variety of health issues, such as oral health, sexually transmitted diseases, nutrition, and chronic diseases. Jorge has authored publications and contributed to various articles and

textbooks regarding oral health and prevention. He is a member of the Georgia Public Health Association and Georgia Oral Health Coalition. Jorge graduated with a D.D.S. degree from the Javeriana University in Bogota, Colombia, and earned an M.P.H. in Health Policy and Management from Emory University.

### **3. Megan Hicks, MPH**

Megan Hicks is a current FDA Tobacco Regulatory Science fellow working in FDA's Center for Tobacco Products. Most recently she served as the executive director of the South Carolina Tobacco-Free Collaborative (SCTFC), where she oversaw several community-level grant programs and supported local tobacco control campaigns. Hicks started at the SCTFC in 2010 as its state program director, working on numerous initiatives and campaigns, including the Communities Putting Prevention to Work grant and the Community Transformation Grant. Hicks began working in tobacco control and prevention at the University of Iowa's Iowa Tobacco Research Center (ITRC) where she assisted with the management, reporting, and development of educational materials for Quitline callers and supported numerous ITRC research projects. She received her BA in communication studies and certificate in public health from the University of Iowa, and her MPH from Emory University, where she is a member of its Delta Omega chapter. Hicks has assisted in grant writing initiatives resulting in awards totaling over \$23 million. This includes funding for the CDC Community Transformation Grant program, a Robert Wood Johnson Foundation rapid response grant supporting smoke-free indoor workplaces, a SelfMade Health Network grant to support efforts in Rural Health Clinics, and a subcontract for the NHBLI COPD Learn More Breathe Better program.

### **4. Leslie Dickman, PhD, MPH**

Dr. Dickman is a Senior Scientist at Genetech in the department of Clinical Pharmacology. She has led several oncology and immuno-oncology programs for both small molecule and protein therapeutics. She has championed the application of pharmacogenomics strategies to clinical programs. She has been highly involved in patient-centric initiatives such as revamping informed

consent forms and applying innovative technologies to enhance patient experience on clinical trials. Much of her grant writing experience comes from the biological and chemical sciences. She recently graduated from Emory University with an MPH with a concentration in epidemiology.

#### **5. Annie Scott RDH, MPH**

Ms. Scott is a Registered Dietitian and Wellness Coach. She has been coordinating and supervising nutrition and health and wellness classes for low income parents and children for over ten years. She has provided nutrition counseling to patient's ages 0 to 85years old. She specializes in topics such as obesity, high blood pressure, diabetes, and hypercholesterolemia. In addition, she has provided encouragement and nutrition curriculums to hundreds of overweight children and parents in Imperial Beach, CA. She has implemented various community nutrition outreach programs with school districts and other community members. She recently graduated from Emory University with an MPH with a concentration in Prevention Sciences.

#### **Protection of Human Subjects**

All pilot program participants will be informed of the purpose of data collected, and all subjects will be free to cease participation at any point in the program. Verbal and written consent will be obtained from all participating parents and or legal guardians of age 18 years old and older. Data will be stored in a secured database and password protection will be used to assure access of data only by BRECHAS personnel.

## Chapter 4: Incorporation of Reviewer Comments

I want to thank each reviewer for taking the time to thoroughly review my grant proposal. I am very grateful for each comment and suggestion which helped to improve my proposal. My reviewers' diversity of professional experiences and perspectives contributed to the comprehensiveness of their evaluations. In addition to suggestions on content I also received feedback on grammatical errors which was much appreciated.

Table 1 has responses regarding multiple choice questions. Detailed responses to the comments are below:

### **Reviewer 1 comments: Dr. David Westfall**

**Comment 1:** Not applicable. I think that it met the criteria.

**Response to comment 1:** No response needed

**Comment 2:** Perhaps some examples of studies that have correlated dental care with improved school outcomes.

**Response to comment 2:** Studies regarding the correlation between dental care and improved school outcomes were added in the outcomes/telehealth section.

### **Reviewer 2 comments: Jorge Bernal**

**Comment 1:** The proposal is very responsive, because the community in general especially the county in discussion is in needing another venue to reach more people to access to oral health services.

**Response to comment 1:** No response needed.

**Comment 2:** The structure has some great points but could be better. The author is using the SBHC as a model to implement a teledentistry program. Even though telemedicine and teledentistry are very similar, the fact that teledentistry has some unique aspects suggests the need for a modified

approach. Also, usually when we are using teledentistry technology it is between providers, and this proposal is going to be used to reach parents, so I have a question about how the technology will be used to reach parents.

**Response to comment 2:** I included an explanation of what pieces of telemedicine or teledentistry BRECHAS will be using to educate the parents.

**Comment 3:** I will change the BRECHAS pilot program plans to provide oral health education in Spanish with telehealth technology and home visiting approach, this way you have a better way to reach the target population, also expand the teledentistry programs to the target schools so we can remove barriers to access. This will allow for more Hispanic parents to understand the importance of oral health and have resources to reduce oral health disparities among school children in Colquitt County.

**Response to comment 3:** The expansion of a home visit component was added to the SBHC section.

**Comment 4:** Like I mention before, the proposal is a wonderful idea and can be used in the near future. It will combine education to reach the parents of the target population and additional facilities that can provide the services needed in the community, i.e. teledentistry or school-based programs. This will improve access to the resources necessary to meet the oral health needs of this population in a remote area of Georgia.

**Response to comment 4:** No response needed.

### **Reviewer 3 comments: Megan Hicks**

**Comment 1:** I would suggest checking the submission against the call for proposals to confirm all required elements are present.

**Response to comment 1:** The call for proposal was re-checked and a few elements were added.

**Comment 2:** Looking closely at whether additional elements might be needed to reach the proposed objectives.

**Response to comment 2:** The document was examined to make sure that the proposed objectives were reachable.

**Comment 3:** It may be necessary to lengthen the period of time stated for recruitment given the target number of recruits.

**Response to comment 3:** The recruitment section was modified and adjusted to reflect a longer period.

**Comment 4:** The FOA mentions a map on page 10.

**Response to comment 4:** A map was added to further explain the location of network members along with the geographic area that will be served through the project.

**Comment 5:** I would provide data on the size of the Hispanic community in the previous section.

**Response to comment 5:** I added the percentage of Hispanic people in the community right next to the total population.

**Comment 6:** In addition to this narrative, you might want to consider a chart showing the partners and a quick summary of their role in the project.

**Response to comment 6:** A chart showing the partners and their roles was added.

**Comment 7:** Exactly how many people will be on the advisory committee?

**Response to comment 7:** The number of people in the advisory committee was added.

**Comment 8:** I think you could go into more depth in the evaluation section.

**Response to comment 8:** The evaluation section was expanded.

## **Reviewer 4 comments: Dr. Leslie Dickman**

**Comment 1:** I'm not exactly sure what is meant by being "more responsive," but as it stands, the proposal satisfies all of the eligibility criteria: 1) services provided to a rural area, 2) the composition of the proposed telehealth network includes more than 2 of the eligible entities listed, and 3) the cost of the program is below \$300,000/year. This grant proposal also has a purpose that is directly in line with that outlined in Section 1 of the announcement. The focus of the grant, oral health, is also specifically called out in Section 1 of the announcement.

**Response to comment 1:** No response needed.

**Comment 2:** The abstract could be restructured so that the objective is clearly stated in the first paragraph.

**Response to comment 2:** The abstract now clearly states the objective.

**Comment 3:** Initially it was difficult to understand who the primary target population was for intervention – children, parents, or both.

**Response to comment 3:** It was further clarified throughout the document.

**Comment 4:** The section, "Self-Assessment" might be clearer if presented in table format instead of bullet points. One suggestion for table columns – Activity, Timing, Output or Measurement

**Response to comment 4:** This section was modified and the chart was added.

**Comment 5:** I think there are some valuable metrics that could be captured that currently are not being captured. A few that comes to mind are a) Percentage of parents that have been reached/consented for program, b) Percentage of parents that did not participate. The author may want to better consider which further metric might be useful.

**Response to comment 5:** Metrics were added.

**Comment 6:** The focus may need to be further clarified. In some sections the focus is on overall oral health but in other sections the focus appears to be on sealant for children. I think the grant



would be better served by more clearly stating what the focus is. This may be different for adults and children, but clearly stating this is important.

**Response to comment 6:** The document was revised to reflect the main purpose.

**Comment 7:** The author does a nice job at outlining the health disparities among the target population (those of Hispanic ethnicity in Colquitt County). The only data that would make this more compelling is if there were statistics on dental health for this community by ethnicity. Not sure if this would exist.

**Response to comment 7:** There is only overall data regarding the dental health of the community. Further assessments will have to be made to capture this data.

**Comment 8:** The author may need to reevaluate the number of parents that she can reach with this program. I think the number currently proposed is the best case scenario, but due to multiple factors (e.g. non-response, both parents not being able to attend telehealth sessions, multiple children from the same parents), I worry that this number is not realistic. The author may want to consider a few scenarios to see how this would affect the number of parents that she will reach through this program.

**Response to comment 8:** The number of parents was revised.

**Comment 9:** The author also points out one challenge in getting parents to show up to the telehealth meetings. However, she does not propose a strategy. This is a concern for me, and I do worry that this will result in low turnout. The author should consider several strategies to proactively address this issue. One potential solution is to hold the telehealth sessions staggered with other school related events. That way parents are not making multiple trips to the school.

**Response to comment 9:** A solution was added to accommodate the parents during afterhours.

**Comment 10:** Lastly, I worry that some of the exclusion criteria will severely limit participation. For instance, the exclusion criteria for parents or guardians who work greater than 8 hours a day could greatly impact enrollment. I don't think there is strong reason to have this.

**Response to comment 10:** The exclusion criteria were taken out.

**Comment 11:** It is unclear if official letters of support are needed from the various organizations and individuals that will participate. If they are needed, the author may want to indicate that these have been secured.

**Response to comment 11:** This section was modified to reflect the letters of support.

**Comment 12:** For the focus groups, in order to get longitudinal data the same parents will need to come to all three focus groups. The author may need to think about the best strategy to make this happen.

**Response to comment 12:** The focus group strategy was expanded.

**Comment 13:** The author suggests hiring a contract statistician. However, she may want to consider collaborating with a MS/MPH/PhD student to avoid these costs. Generally, a student will do the analysis pro bono in return for authorship, future reference, and something to put on their CV.

**Response to comment 13:** A Junior Epidemiologist was added to the team instead of a statistician.

### **Reviewer 5 comments: Annie Scott**

**Comment 1:** I really liked the outline of the statisticians and the details of their languages and what they will be doing to collect the data. The committee is another good way to show that the data will be collected and discussed. I think the schedule was very detailed and didn't make me hesitate that the program will accomplish what it aims to do in the allotted time.

**Response to comment 1:** No response needed.

**Comment 2:** I would fund this program! I think the ideas, details and research in the paper make a good proposal. I can tell a lot of work was put into this paper and the level of detail will help to fund the program more. I made some comments on things that may need a little bit of clarification. I think I understood, but just wanted to be sure everything is extremely clear. Highly impressed with the appendices used and the amount of references.

**Response to comment 2:** No response needed

Table 1A: Results of Multiple Choice Questions					
Question	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
The submission is responsive to the call for proposals.	4	1			
The proposal is well thought out and theoretically sound.	3	2			
The PI makes a compelling case that the proposed research/project/program is necessary.	3	2			
The PI makes a compelling case that the research team will be able to accomplish the proposed activities with the resources and time allocated.	2	3			

The proposed work is innovative and sets the groundwork for future work in this area.	3	2			
---	---	---	--	--	--



## Chapter 5: Proposal

### Project Abstract

Project Title	BRECHAS Telehealth Network Program
Applicant Organization Name	Latino Community Fund Georgia (LCFG)
Address	3299 North Decatur Rd, Atlanta, GA 30031
Project Director Name	Allison Carmona, DMD, MPH
Contact Phone Numbers	(678) 537-6797
Email Address	Acarmona@LCFG.com
Website Address	www.Brechhas.com/colquitt

### Funding Preferences

The pilot program requests funding for logistical planning, materials and building the telehealth network.

### Needs, Objectives and Projected Outcomes

Colquitt County, GA has an unmet need for oral health education. There is a disconnect in the understanding of the benefits of oral health and sealants in the Hispanic community, specifically for the parents of elementary school kids. The BRECHAS pilot program plans to provide oral health education in Spanish through telehealth technology, thereby closing the knowledge gap and removing access barriers. Through the BRECHAS program Hispanic parents will gain an understanding of the importance of oral health, therefore helping to reduce oral health disparities among school children in Colquitt County.

## **Service Area**

The target population of this grant application is Colquitt County, GA. This county has a population of 45,845 people, of which 19.8% is Hispanic (US Census Bureau, 2017). Colquitt county is considered 59% rural (US Census Bureau, 2017). The county is composed of 556.6 square miles and has been considered as a low-income/population group (US Census Bureau, 2017). In addition, the Health Resources and Services Administration (HRSA) has designated Colquitt County as a Health Professional Shortage Area (HPSA) in primary care (2,410:1), dental health (3,810:1) and mental health (2,540:1), and a full Medically Underserved Area (MUA) (Federal Register, 2015)(County Rankings, 2018).

## **School Based Health Centers (SBHC)**

According to HRSA, a School-Based Health Center is a facility within the school providing services to the students and their families, to meet their needs regarding primary medical care, mental health care, dental oral health, case management and nutrition education to mention a few (HRSA, 2017). SBHC's treat acute conditions such as flu and chronic conditions such as asthma and diabetes. Students are screened for dental, vision and hearing problems. There is great emphasis on prevention, early intervention and risk reduction. Families and Students are counseled on healthy habits, injury prevention and violence.

Additionally, school-based health centers operate as partnerships between schools and community health organization, which includes community health centers, hospitals, or local health departments. It is important to point out that services provided by SBHC's are tailored to the community needs and resources.

Currently in Colquitt County, there are two SBHC sites established, which provide telehealth services to two of the chosen elementary schools selected by the BRECHAS program. These sites are part of the Packer Health Clinic, which is comprised of a partnership with four organizations

that established SBHCs to serve Colquitt County's underserved community. The organizations are Colquitt Regional Medical Foundation, Colquitt County Board of Education, Colquitt County Health Department and Georgia Partnership for Telehealth. The Packer Health Clinic is located at the following schools: Stringfellow Elementary, Okapilco Elementary and C.A. Gray Jr. High. The main objective of these clinics is to meet the minor health needs of students without the students having to be absent from school (Colquitt Regional Medical Foundation, 2018).

The Packer Health Clinics utilize medical devices equipped with cameras to facilitate collaboration with local healthcare providers during patient exams. This promotes synergy amongst school nurses and physicians / health providers to effectively serve the community by expanding health care access. Some of the services offered by the Packer Clinic include:

- Care for acute illnesses (i.e. sore throat, earache, skin rash)
- Management of ongoing care of existing medical conditions (i.e. asthma)
- Lab tests (i.e. strep tests, flu screens, urine analysis).

Prior to students participating in the program, written parental consent is required. The clinic does not require parents to be there but they are encouraged. Some of the local healthcare providers already involved in the program include Dr. Patricia June, Dr. Woody Weeks, and Nurse Practitioner Cassidy Fowler (Colquitt Regional Medical Foundation, 2018).

Based on the success of the Packer Clinic telehealth model to provide healthcare services, the BRECHAS pilot program will be adopting this model as a base to:

- Expand the current model at Stringfellow and Okapilco Elementary to add access to oral health education to Spanish speaking parents / guardians.
- Adopt the model in two new schools, Cox and Sunset Elementary, to provide oral health access education to Spanish speaking parents / guardians.

Depending on BRECHAS pilot program's results, this telehealth model will be expanded to other elementary schools in the county in Spanish and English. This will help to target underserved minorities in the community. In addition, a home visit component will be added based on the program's success.

### **Clinical Services to Be Provided**

The program uses telehealth via videoconferencing to expand access to oral health education in Spanish for Hispanic parents / guardians.

### **Actual Parents/ Persons Served**

According to the Association of State & Territorial Dental Directors (ASTDD), the School-Based Sealant Program (S-BSP) is funded by the Georgia Oral Health Prevention Program (GOHPP) to target high-risk schools with large proportions of low-income families (2014). One of the requirements of the GOHPP's School-Based Sealant Program is for the schools to have at least 50% of the students eligible for the Federal Free-and-Reduced Lunch Program. BRECHAS will utilize this requirement to identify the parents and legal guardians for these children at all four schools. An estimated 1,081 students currently qualify for free/reduced-price lunches at the four elementary schools for this pilot program. The goal is to enroll and serve the parents or legal guardians of these students through BRECHAS at the targeted School-based Health Centers and potential telehealth network sites.

### **Self-Assessment**

Self-assessment is an important tool to evaluate pilot programs in regards to quality assurance, progress and process improvement. These are some of the activities that BRECHAS will be using to self-assess and effectively evaluate the program (Table 1):



Table 1: BRECHAS Self-Assessment Activities

Activity	Timing	Outcome
Meeting with the School-Based Sealant Program coordinator for these four elementary schools to gather data on the number of children served.	2 times a year	This will help to compare if the number of Hispanic children served by the S-BSP increased after BRECHAS was implemented.
Meetings with Advisory Board and stakeholders	Quarterly	Program planning, review progress and budget oversight.
Focus groups	2 times a year	This will help identify the parents' perceptions, emotions and feedback from the program, to better assist them.
Review of program data gathered from pre and post oral health surveys	Every time there is a video conference	This will show parents' comprehension of the material.
Program Staff Meeting	Monthly	To maintain the vision and talk about improvements, changes and new ideas.
Track how many parents have been reached	Throughout the whole program	To compare numbers of parents actually attending the video conference.
Track how many parents refused the program or refused to take part	Throughout the whole program	To compare with number of parents reached so there could be improvements.

**Outcomes – Telehealth Services**

Implementing the BRECHAS pilot program will add value to overall healthcare services in the community by expanding services of the existing Colquitt Telehealth network. For example, as the Packer Health Clinic is currently providing healthcare services, BRECHAS wants to expand those services and add oral health education with a particular focus on Spanish speaking/Hispanic parents. As the program focuses on educating parents regarding oral health and healthy food consumption, their behavior will impact the overall health of their children. Not only will the overall health be impacted but the student's overall school performance will be positively impacted. Studies have shown that improving children's oral health status may be a vehicle to enhancing their

educational experience (Jackson et al., 2011). In addition, this program will be providing access to distance learning, saving time and money for these low-income families. It is hoped that this will advance our goal of reduced oral health disparities among Hispanic school children in Colquitt County.

## **Sustainability**

This program plans to disseminate the survey results to various Hispanic and dental organizations in the community to continue sustainability of the program as well as expansion. Some of the activities in the sustainability plan will include:

- Obtaining input and buy-in from coalition members and key external decision makers
- Defining short-term and long-term financing strategies
- Creating an organizational plan that implements the best use of human, financial, and in-kind resources

## **Project Narrative**

### **Introduction**

The proposed pilot program entitled “BRECHAS” is a comprehensive school-based telehealth program that aims to close gaps in oral health knowledge, for Hispanic parents within four elementary schools in Colquitt County, Georgia. The English translation of “BRECHAS” is “gaps”, which is used to symbolize the closing of oral health disparities in the Hispanic community. The BRECHAS logo symbolizes the bridge created between telehealth, oral health education and overall healthcare. The program’s mission is to educate Hispanic parents on the importance of oral health and how it affects overall health in general. BRECHAS will provide these parents in their native language (Spanish) with the tools to understand basic information regarding oral health, sealants and their importance. The BRECHAS Telehealth Program will

institute a multidisciplinary approach to nurture oral health collaborations amongst oral health and School personnel and Community Stakeholders.

### **Overview of Telehealth Network**

In Georgia, the need for dental care providers throughout the state is great, particularly in rural areas. Colquitt County, GA has been designated a full health professional shortage area (HPSA) for primary medical, dental, and mental health care. In addition to being an area with a full health professional shortage, the community is also affected by low health literacy and language barriers. Under the application guidelines for HRSA (funding opportunity announcement [HRSA-16-012](#)), Latino Community Fund Georgia (LCFG) proposes a telehealth program to educate parents of elementary school children regarding oral health utilizing telehealth in four elementary schools in Colquitt County.

LCFG supports Latino-serving nonprofit organizations and programs in Georgia with advocacy, program development, technical assistance and grant making. The main focus is to develop programs and provide low-fee or free technical assistance in the areas of development, fundraising strategies, meeting planning, contract negotiating, grant writing, meeting facilitation, communications, storytelling, coalition building and advocacy training. For this reason, LCFG created the BRECHAS Pilot Program to support the underserved Hispanic community in Colquitt County.

LCFG is collaborating with four organizations that have partnered to improve access to medical care for school children in Colquitt County to implement BRECHAS. These organizations include Colquitt Regional Medical Foundation; Colquitt County Board of Education; Colquitt County Health Department; and Georgia Partnership for Telehealth. As previously mentioned, these organizations have also worked together to establish the Packer Health Clinics. BRECHAS is

seeking support from the Packer Health Clinics with their existing technology and will advise in the implementation and expansion of the oral health education program. The pilot program will only use the video equipment of telemedicine to educate the parents.

The Dental College of Georgia (DCOG) and Georgia Department of Public Health are partners in providing teledentistry (Clinical dentistry via telehealth) to rural areas of South Georgia. They are also a part of the coalition bringing the clinical and oral educational experience to the program. Both the DCOG and School- Based Sealant Program will be crucial for the support and success of the BRECHAS program. The pediatric dental residents from the DCOG will support the telehealth videoconferences and provide professional assistance to the parents. For BRECHAS, the pediatric dental residents will only use the video equipment piece of teledentistry to educate the parents. The School-based Sealant Program specialist will support BRECHAS as a liaison in the enrollment and transition phase.

### **Proposed Pilot Program Activities**

The BRECHAS pilot program has various specific activities which start with an assessment of the parents' oral health knowledge by taking a baseline survey, prior to the telehealth video conference followed by another survey post video conference. The telehealth video conference will be given by dentists and dental students from the Dental College of Georgia to a group of approximately 20 parents. Phase one of the conference will teach the parents about oral hygiene (brushing, flossing...etc) and healthy food consumption. The hygienist will hand out tooth brushes and floss for practice on a practice dummy. Phase two will cover sealants and the School-based Sealant Program. This phase will explain in detail the S-BSP enrollment process and the importance of the parent consent forms. Key personnel will be assigned so parents have resources in case any questions arise. There will be a Q and A (question and answer) session after the conference where parents are able to ask questions and voice their concerns, while talking to someone live. At the end,

the parents will take an oral health post-survey to test their acquired knowledge. As shown below in table 2, the order of the proposed activities for each meeting is described in detail.

Table 2: Proposed Pilot Program Activities
1. Parent/caregiver consent forms (HIPAA form) will be distributed by hygienist and signed by parents before starting with the meeting (Attachment).
2. Dental hygienist introduces the program and explains how long the meeting is going to take.
3. Dental hygienist administers the oral health baseline survey.
4. Dental hygienist collects baseline surveys and hands out booklets and oral hygiene materials.
5. Hygienist introduces the parents to the dentist via video-conferencing
6. The dentist / dental student gives a 10-15 minute class via video-conferencing
7. The dentist/ dental student opens the floor for questions regarding the material.
8. Dental hygienist hands out the post-test
9. Case manager will manage the S-BSP referral process by contacting and following up with parents and coordinating with the S-BSP Specialist.

It is important to point out that focus groups will be held at the beginning, middle and end of the pilot program. These focus groups will assess the perception of the parents regarding oral health and the telehealth conference.

### **Recruitment and Selection**

The parents will be recruited from Cox, Sunset, Stringfellow and Okapilco Elementary schools by advertising during open houses at the beginning of the school year. In addition, flyers will be sent home throughout the year with the children as well as advertised in the local Hispanic grocery stores. In partnership with local businesses and local churches, we plan to recruit a minimum of 534 parents / legal guardians. This participation rate will allow for a 3% margin of error and 95% confidence level with the survey responses. The following criteria will be required for participation in the pilot program:

#### Inclusion Criteria:

1. Parent's or Guardian's Age  $\geq$  21years old
2. Their children have to attend one of the four schools in Colquitt County

3. They have to know how to read and write in Spanish

Informed consent will be obtained from all participants prior to participation in surveys and focus groups. Participants in focus groups will be drawn from survey responses. Incremental payouts will be done with first, \$10 if they come to the first focus group, \$15 for the second, and \$20 for the third. This process is in place due to ensure that the same parents come back for all three groups.

## **Members**

As previously mentioned BRECHAS will expand the oral health education services for the Packer Health Clinic and start new initiatives at for Cox, Sunset, Stringfellow and Okapilco Elementary schools. The advisory committee will support BRECHAS in planning and supporting this initiative. Letters of support have been received from all of the partners below. The committee is composed of 7 representatives from the following organizations, including LCFG:

- The Colquitt Regional Medical Foundation - Nicole Gilbert
- The Colquitt County Board of Education – James Howell
- The Colquitt County Health Department – Charles Ruis, M.D.
- The Georgia Partnership for Telehealth (GPT) – Rebecca Paulding
- The Dental College of Georgia – Lisa Haynes D.D.S
- Georgia Department of Public Health (School-based Sealant Programs) – Carol Gibbson

The Advisory Committee will develop a formal structure for the proposed telehealth oral health education system to be linked through School-Based Health Center and Georgia School-Based Sealant Programs. The Committee will hold quarterly meetings to establish goals, roles and review program's progress. A pediatric dentist or representative from The Dental College of Georgia

will provide dental expertise during the planning and implementation process. Activities of the Committee will include but not limited to:

- 1) Informing the community about the pilot program inclusive of Spanish speaking churches, Hispanic Supermarkets and Social Services about pilot program
- 2) Getting support from school administrators, parents and teachers
- 3) Enrolling parents in pilot program
- 4) Planning for sustainability

The following is a summary of the role of each board member:



Latino Community Fund Georgia

- Allison Carmona, D.M.D, MPH
- President - Provides leadership and ensures progress on overall long- and short-term goals, objectives, and priorities.



The Colquitt Regional Medical Center (Foundation)

- Nicole Gilbert
- Vice President - Assumes duties of the president in his/her absence. Provides leadership and ensures progress on overall long- and short-term goals, objectives, and priorities.



The Colquitt Board of Education

- James Howell
- Treasurer - Provide oversight for budgetary decisions as well as guide in regards to the school system. Monitors budget.



The Colquitt County Health Department

- Charles Ruis, M.D
- Secretary - Ensures that minutes are taken at the Board of Directors meetings. Acts as a signing authority on behalf of the Board for financial and legal purposes



The Georgia Partnership for Telehealth

- Rebecca Paulding
- Advisor - Provides guidance regarding telehealth



The Dental College of Georgia

- Lisa Haynes, D.M.D
- Advisor- Recruits pediatric dental students and provides oversight with oral health materials.



Georgia Department of Public Health

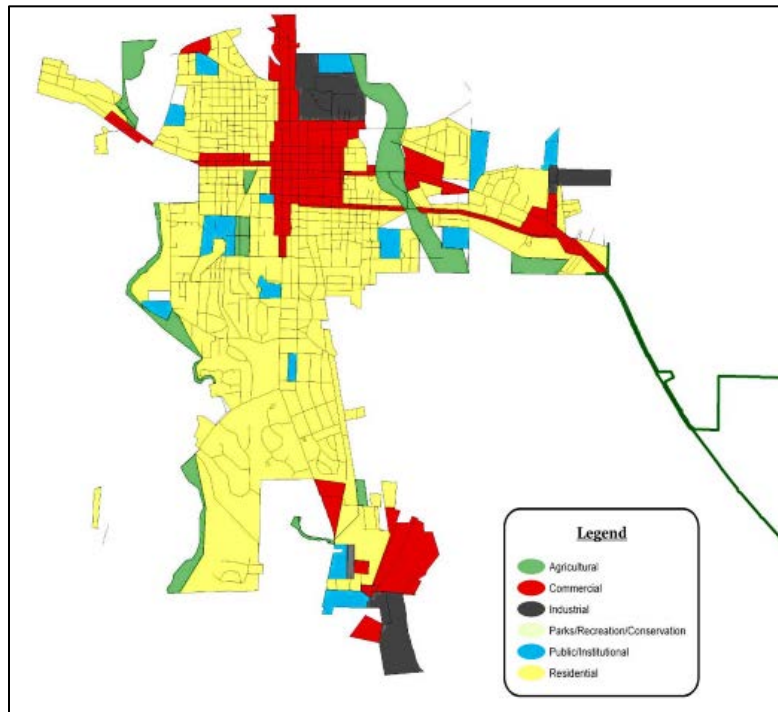
- Carol Gibbson
- Advisor - Guidance regarding oral health and the School-Based Sealant Program. Brings state level experience.



## Needs Assessment

Colquitt County, located in southwest Georgia was established in 1856 by the Georgia General Assembly. The county's seat and largest city, Moultrie, was established in 1879 (Map 1). All of the schools that will be serviced by BRECHAS are located in Moultrie.

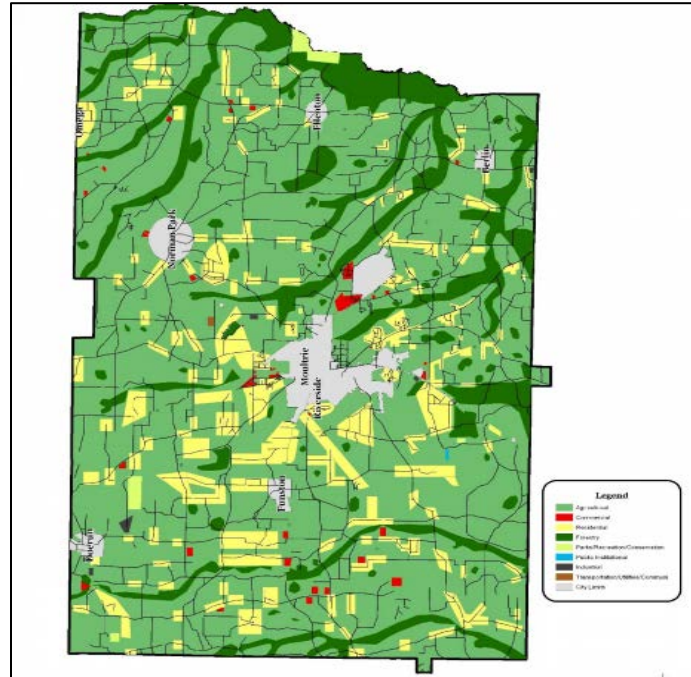
**Map 1: Moultrie Landuse Map**



Source: South West Georgia, 2008

Other incorporated municipalities include: Berlin, Doerun, Ellenton, Funston, Norman Park, and Riverside (Archway Partnership, 2018). According to Census Bureau data (2010), the county consists of 544 square miles of which 575 square miles is land area and 12 square miles is water (Map 2). Based on the 2018 County Health Rankings, more than half of Colquitt County is considered rural (59%).

## Map 2: Colquitt County Landuse Map



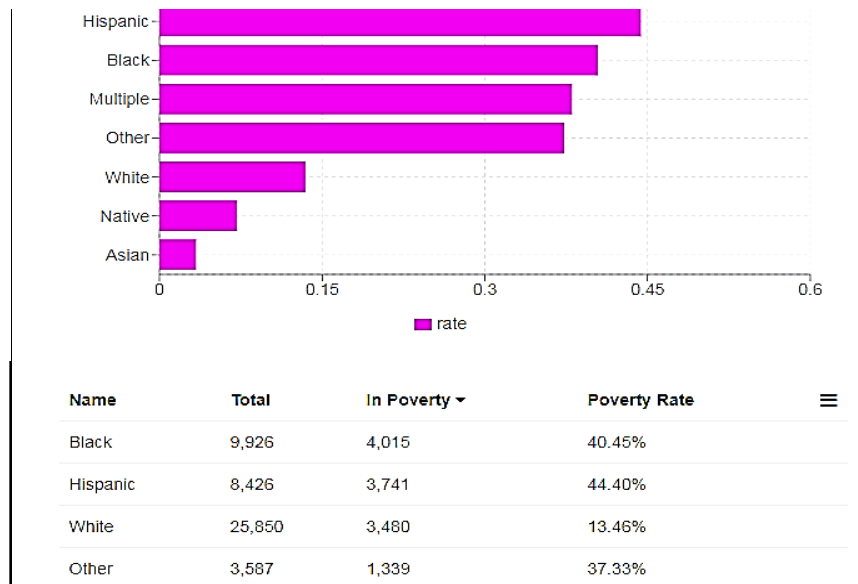
Source: South West Georgia, 2008

According to the 2017 Census, Colquitt County has a total population of 45,835. The racial makeup of the county is 72.9% white, 23.5% black or African American, 0.9% Asian, 1.3% American Indian and 1.2% from two or more races. Those of Hispanic or Latino origin make up 19.8% of the population and 13.9% of the total population was Mexican. In addition, approximately 22.4% of children in Colquitt County are Hispanic and younger than 18 years old. Nearly 7,500 migrant and seasonal farm workers reside in Colquitt County (Larson, 2008). The employed population works in farming, fishing, and forestry industries. Colquitt County has been considered the top agricultural producer in Georgia, contributing the highest dollar value of production to Georgia's total production value since the year 2000 (2010). Approximately 19.1% of migrant farm workers in Colquitt County in the year 2000 were hired as farm labor (Larson, 2008). Migrant farm workers usually work on farms that produce vegetables, such as cabbage and greens, and others

work on farms that produce row crops, with cotton and peanuts being the major products (Glenn Beard, Colquitt County Extension Agent, oral communication, 2012).

According to the Census Bureau, of the 18,539 households, 38.9% had children under the age of 18 living with them, 48.7% were married couples living together, 17.3% had a female householder with no husband present, 28.3% were non-families, and 24.0% of all households were made up of individuals (2017). The average household size was 2.73 and the average family size was 3.21. The median age was 34.8 years (2018). The median income for a household in the county was \$32,902 and the median income for a family was \$39,086. About 18.8% of families and 23.4% of the population were below the poverty line, including 32.7% of those under age 18 and 16.8% of those ages 65 or over (2018). When examining poverty rates by race in Colquitt County, Hispanic residents (44.40%) have higher rates compared to White (13.46%) or Black (40.45%) residents (Figure 1).

**Figure 1: Colquitt County, GA Poverty by Race**

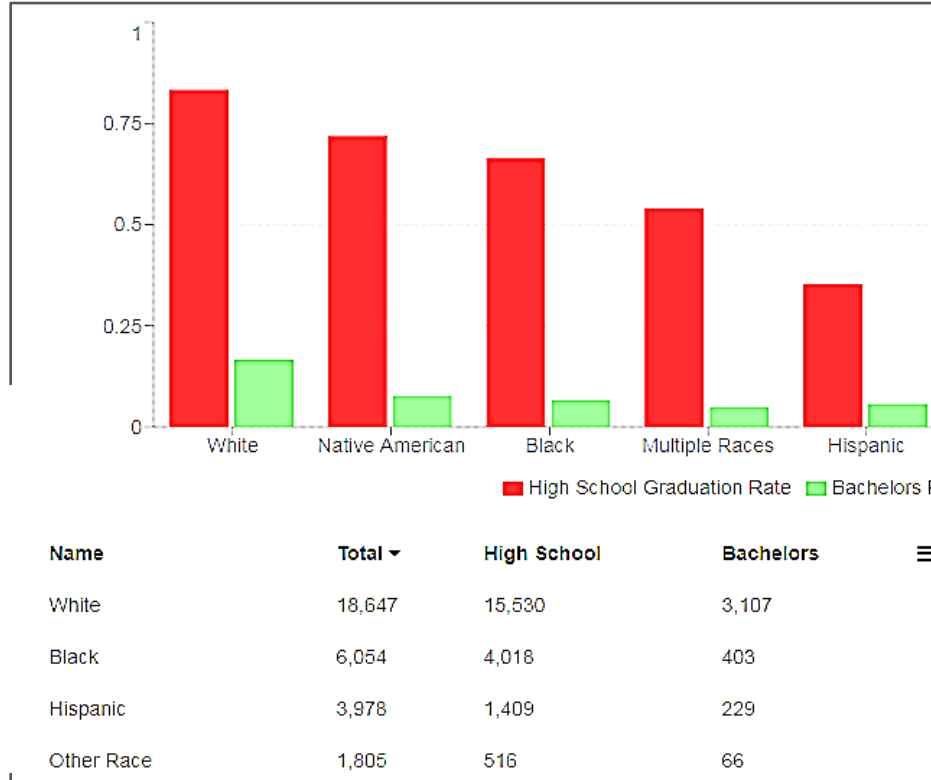


Source: World Population Review, 2018

When examining education rates by race in Colquitt County, the highest rate of high school graduations are among White residents (83.28%) compared to Hispanic (35.42%) and Black

residents (66.37%). Furthermore, the highest rate of bachelor’s degrees are among White residents (16.66%) compared with the rest of the residents (Figure 2).

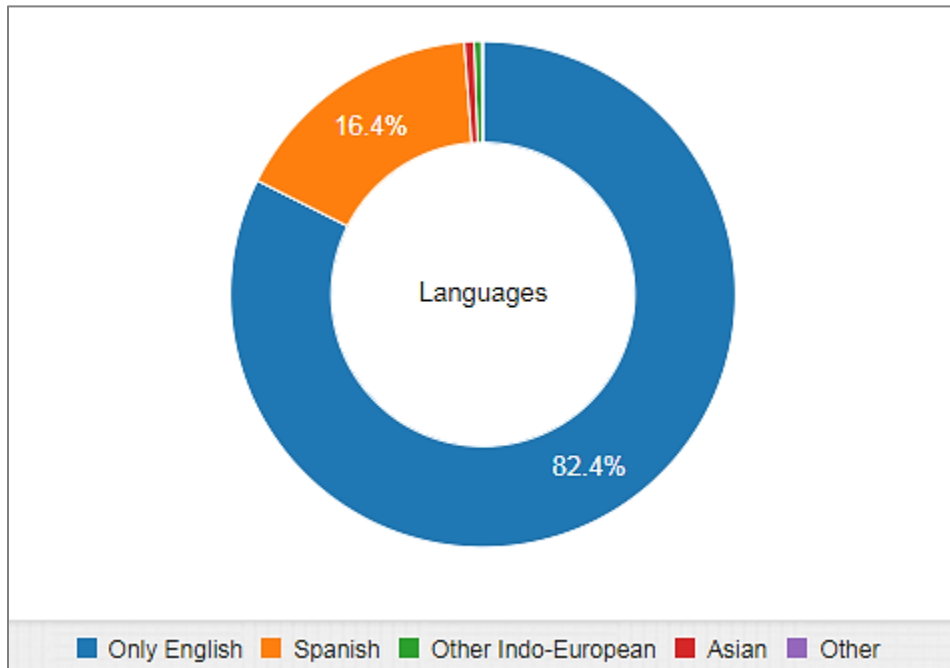
**Figure 2: Colquitt County, GA Education by Race**



Source: World Population Review, 2018

In Colquitt County, approximately 82.43% of the residents speak only English, while 17.57% speak other languages. The largest non-English language spoken in the county is Spanish, which is spoken by 16.39% of the population (Figure 3).

**Figure 3: Colquitt County Languages**



Source: World Population Review, 2018

### Healthcare Needs

When examining the health care needs of the county for an oral health education pilot program, it is important to not only focus on the oral health needs but health care needs as a whole. Healthcare needs are connected and each piece affects the overall health of the individual. Based on the 2018 County Health Rankings for Colquitt County, there was a significantly lower patient-to-provider ratio of dentists, primary care physicians, and mental health providers compared to state and national levels. The ratio of patients-to-dentists in Colquitt County is almost three times higher than national levels (Table 3), which explains HRSA’s designation of the county as a Health Professional Shortage Area.

Clinical Care	Colquitt County	GA	US
Primary Care / Physicians	2,410:1	1,520:1	1,030:1
Dentists	3,810:1	1,980:1	1,280:1
Mental Health Providers	2,540:1	830:1	330:1

Source: County Health Rankings and Roadmaps, 2018

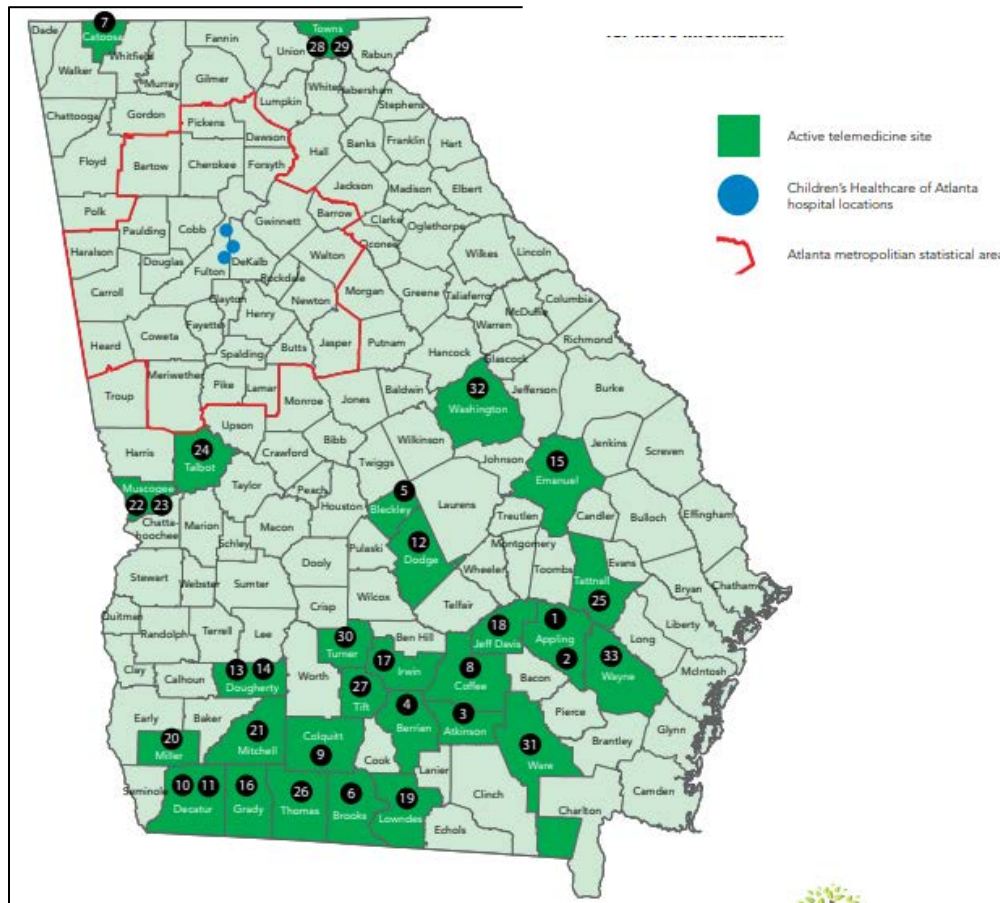
Based on 2018 County Health Rankings, Colquitt County had unfavorable health outcomes compared to state and national rankings (Table 4). It is important to point out that although unemployment rates were not as high as national unemployment rates, child poverty is still higher compared to national poverty rates. The percentage of uninsured children was slightly higher than state average, but more than 3 times the national average. Lastly, child mortality rate was significantly higher than state and national rankings.

Health Outcomes	Colquitt County	Georgia	U.S.
Poor or fair health	24%	19%	12%
Child Poverty	37%	23%	12%
Child Mortality	90*	60*	40*
Uninsured Children	10%	7%	3%
High school education	86%	80%	95%

Source: County Health Rankings and Roadmaps, 2018 (\*: Per 100,000)

Colquitt County has three active telemedicine sites which have partnered with Children’s Healthcare of Atlanta. Map 3 gives perspective of how far Colquitt County is from Atlanta Metropolitan area, showing the need for a strong telehealth / telemedicine network.

**Map 3: Statewide Telemedicine Network**



Source: CHOA, n.d.

### Target Population

Colquitt County, GA was selected mainly based on the grant’s purpose of demonstrating successful telehealth networks by “*encouraging telehealth services delivered through school-based health centers/clinics (SBHC), particularly those serving high-poverty populations*”. The target population was selected based on the rural distribution of the schools, pilot program’s mission to increase access to oral health education among rural Hispanic parents and children, and the Colquitt County’s established telehealth network of SBHCs. As explained before, the pilot program expects that approximately

534 parents and or legal guardians will eligible for BRECHAS Pilot Program. This number was calculated as follow:

- 1) Based on the total average of Hispanic children receiving free/reduced-price lunch from each school, which is 1,081 parents / legal guardians.
- 2) Assuming that 25% of the parents or guardians will not participate for various reasons, that leaves us with 811 parents / legal guardians.
- 3) We can assume that 25% of the students are siblings, which leaves us with 534 parents or legal guardians in total.

The proposed target population is described below (Table 5):

School	Summary
Cox Elementary	The number of students is 595. The demographics of our school community consist of 45% Hispanic, 43% African-American, 10% Caucasian, and 2% multi-racial students. At 46%, nearly half of our students live in a single parent household. Approximately 17% of the students are considered homeless. Over 98% of the student population is considered economically disadvantaged, and all qualify for free and reduced meals through the Community Eligibility Provision.
Stringfellow Elementary	The number of students is 364. The demographics of our school community consist of 23% Hispanic, 70% African-American, 5% Caucasian, and 2% multi-racial students. Approximately 17% of the students are considered homeless. Over 98% of the student population is considered economically disadvantaged, and all 95% of the student's qualify for free and reduce or reduced meals through the Community Eligibility Provision.
Okapilco Elementary	The number of students is 539. The demographics of our school community consist of 18% Hispanic, 18% African-American, 41% Caucasian, and 3% multi-racial students. Over 98% of the student population is considered economically disadvantaged, and 95% of the student's qualify for



	free and reduce or reduced meals through the Community Eligibility Provision.
Sunset Elementary	The number of students is 539. The demographics of our school community consist of 17% Hispanic, 34% African-American, 41% Caucasian, and 2% multi-racial students. Over 94% of the student's qualified for free and reduce or reduced meals through the Community Eligibility Provision.

Source: Georgia.Gov, 2018

## Methodology

The BRECHAS Pilot Program's mission is to close the gap between oral health literacy and increase positive oral health behaviors among Hispanic parents / legal guardians and their children in Colquitt County. It is important to target the parents /legal guardians, as decision makers, to be able to teach how them to utilize all of the resources already available. In order to accomplish BRECHAS' mission it is necessary to establish the following goals and objectives:

<b><i>Goal 1: Provide access to oral health education to Spanish speaking parents of four elementary schools in Colquitt County, GA a designated Dental Provider Shortage Area (DPSA).</i></b>
<ul style="list-style-type: none"> <li>○ Objective 1.1: Provide oral health education by forming partnerships with the Packer Clinic, the Georgia Telehealth Networks and the Dental College of GA, allowing dentists to educate Hispanic parents at a distant.</li> </ul>
<ul style="list-style-type: none"> <li>○ Objective 1.2: Provide a platform using audio video-conferencing to allow dentist and parents to have an open interaction where parents are allowed to express their concerns regarding oral health and as questions.</li> </ul>
<ul style="list-style-type: none"> <li>○ Objective 1.3: Create culturally competent booklets and pamphlets to go along with the conference meeting to increase oral health literacy.</li> </ul>
<b><i>Goal 2: Increase the number of Hispanic children being served by the GDSP at Cox, Sunset, Stringfellow and Okapilco Elementary.</i></b>
<ul style="list-style-type: none"> <li>○ Objective 2.1: Increase the number of sealant consent forms signed by Hispanic parents / legal guardians at these four schools by creating a step by step visual educational process.</li> </ul>
<ul style="list-style-type: none"> <li>● Objective 2.2: Create a follow up system where case managers and volunteers follow up with the parents</li> </ul>
<b><i>Goal 3: Foster partnerships and collaborations to build and maintain a strong telehealth oral health network to serve the Hispanic community in Colquitt County.</i></b>
<ul style="list-style-type: none"> <li>○ Objective 3.1: Develop and maintain a county-wide/health district network of leaders for oral health advocacy, planning, and messaging.</li> </ul>

- Objective 3.2: Create county-wide campaigns to involve employers, health workers and local churches to promote the program and organize initiatives and outreach.

**Facilities**

The telehealth meetings and focus groups will be held in the library of each of the school within the target county. The library has been a place where most of the open house meetings have been held, which allows the parents to be familiar with the space. Additional chairs will be added and arranged in a class setting style to face the projector screen which will be installed. Adapting the schools to serve as SBHC helps to save cost from renting a facility. It is important to point out that the BRECHAS’ personnel will have to adhere to the elementary school rules.

**Equipment**

In order to have a successful telehealth pilot program, there needs to be appropriate equipment to provide a stable internet connection and successful videoconference. Due to the established partnership with Packer Health Clinics, some of the equipment will be borrowed. For instance, the Packer Health Clinics have the proper telehealth infrastructure in place, which includes: telehealth carts equipped with a portable computer, a video camera and a keyboard. Two of the elementary schools selected for this pilot program are part of the Packer health clinic initiative and have a telehealth carts available. Borrowing equipment from two schools will help to cut equipment costs, at least for the beginning of the pilot program. Additional equipment needed to successfully complete the telehealth meetings include:

<b>Hardware Requirements:</b>
○ Telehealth tablet
○ Telemedicine Cart (Computer with keyboard and operating system (windows), built in microphone and camera)
<b>Software Requirements:</b>
○ Internet connection (recommended speed 15Mbps downloads/5Mbps uploads).
○ Cloud-based software – Survey data will be stored on cloud-based server
○ Virtual Private Network (VPN) Software

<ul style="list-style-type: none"> <li>○ Encryption and security software (HIPAA compliant) – Ensures confidentiality by encrypting all data (audio, video, file sharing)</li> </ul>
<b>Additional :</b>
<ul style="list-style-type: none"> <li>○ Projector</li> </ul>

**Work Plan**

*(Please see Attachment 3 for Proposed Work Plan)*

*(Please see Attachment 4 for Logic model)*

**Resolution of Challenges**

A potential major obstacle to the program is the Hispanic family’s perception of the dental services. Studies on Mexican rural migrant workers have shown that their attitudes towards dental services are based on generational traditions (Horton et al., 2009). Parents only take children to the dentist when the child is in pain or there is visible decay. Changing oral health perceptions will require gaining trust from the parents even before recruitment. Doing out reach events with key Hispanic community leaders and establishments (Churches, local Hispanic grocery stores) will be necessary to overcome mistrust. It is important to take in consideration their possible perceptions when recruiting for the focus groups and the video conference meeting. Also, approaching them in their same language will be crucial.

Second, there may be some obstacles in getting parents to actually show up to the oral health meetings. If they do not understand the true benefits of the meeting, parents may not attend and thus, disregard. Also, many parents work in agriculture or factories around the area, which will require the scheduling meeting times around their work schedules. BRECHAS will coordinate evening meetings during the week as well as weekend meetings to accommodate the parents’ schedule.

Third, the literacy level amongst the parents in the community is low; therefore, ensuring educational materials are written in plain Spanish and not slang will be vital. Incorporating pictures

will be a good visual aid to help with the written information. This will be a key component to successful delivery to the community.

## **Evaluation and Technical Support Capacity**

The BRECHAS program evaluation will engage parents primarily as well as the dental sealant coordinator for the School-Based Sealant Program. Given the challenges in assessing whether oral health knowledge has increased as a result of the pilot program, evaluation will focus on changes in knowledge, attitudes, and behaviors in response to oral health.

Pre-evaluation survey data will be collected from parents prior to videoconference. Additionally post evaluation surveys will be collected sometime after videoconference. Pre and post surveys will be added in the appendix section. The evaluation analysis will help to identify behaviors, perceptions and if material retention is occurring. Also, this will become the baseline for assessing the program's progress. In addition, focus groups will be held to give BRECHAS personnel an opportunity to interact with the parents / legal guardians in a discussion fostering environment where they are able to freely express personal and or group feelings, perceptions and opinions. The dental sealant coordinator will be tracking the number of Hispanic children served by the School-Based Sealant Program. The data collection and analysis plan is presented below (Table 6):

Table 6: Data Collection and Analysis Plan

<b>Action</b>	<b>Data Collection</b>	<b>Analysis</b>
<p>Enrolled parents complete surveys at the beginning and end of telehealth meetings.</p> <p>In-depth qualitative data on parent experience will be conducted to collect attitudes, behaviors, and personal experiences around oral health.</p>	<p>Survey</p> <p>Focus group</p>	<p>Quantitative and qualitative data analysis to compare responses from completed surveys. This will help assess information retention.</p> <p>Coding of qualitative data to determine themes regarding oral health perceptions.</p>

**Evaluation Plan**

Quantitative data will be obtained to calculate the percent change of parental/guardian knowledge and analyzed by junior Epidemiologist. Qualitative data from the surveys and focus groups will also be analyzed by junior Epidemiologist. Themes connected to oral health behaviors and perceptions will be determined from the qualitative data. Data will be analyzed and organized statistically to show trends and percentage change. Data from the case manager will be gathered regarding the parents that were successfully contacted and the number of parents that rejected the intervention. Table 7 offers an overview of evaluation objectives and related evaluation questions.

Table 7: Evaluation Objectives & Questions

<b>Objectives</b>	<b>Evaluation Questions</b>
<p><i>Baseline Measurement</i></p> <p>Prior to the videoconference, a baseline survey will be conducted to collect demographic information, knowledge, attitudes, and behaviors regarding oral health.</p>	<p>What is the level of awareness surrounding oral health?</p> <p>What is the level of acceptability surrounding regarding BRECHAS?</p> <p>What level of self-confidence does respondent have regarding oral health?</p>

	<p>Have respondents spoken with their children or friends and family regarding oral health?          What are the attitudes and beliefs of oral health?</p>
<p><i>Impact Evaluation</i>          A post survey will be given to the parents to assess any changes from baseline.</p>	<p>What is the level of awareness surrounding oral health?          What is the level of acceptability surrounding regarding BRECHAS?          What level of self-confidence does respondent have regarding oral health?          Have respondents spoken with their children or friends and family regarding oral health?          What are the attitudes and beliefs of oral health?          What level of change was measured in comparison to the baseline?          Which survey questions were the parents able to recall?          Were the parents most responsive to the videoconference, booklets or survey?          What are respondent's attitudes toward BRECHAS?</p>
<p><i>Midpoint Measurement</i>          At midpoint, assess parents' attitudes toward BRECHAS and oral health through focus groups at a random sample of participating parents.</p>	<p>Which survey questions were the parents able to recall?          What are parents' attitudes toward BRECHAS?          What suggestions for improvement are seen for the program?</p>
<p><i>Impact Evaluation</i>          Assess possible impact on parent engagement in desired behaviors post-program.</p>	<p>How many parents were enrolled in the program from word of mouth?          How many parents joined to help recruit other parents?</p>

In some cases, data will be analyzed midway through the program to assess whether the program is reaching the desired effect. This includes analysis of reporting data and focus groups. If results show the program is not meeting objectives, this will allow time for adjustments. The program evaluation will rely on the data collection tools outlined in Table 8.

Table 8: Data Collection Methods and Tools	
Method	Data Collection Tools
<b>Quantitative</b>	Reports on number of Hispanic children being served by S-BSP Reports on number of parents enrolling in BRECHAS Reports on number of parents rejecting to enroll in BRECHAS
<b>Qualitative</b>	Parent focus groups
<b>Mixed</b>	Baseline and Post videoconference Surveys

Evaluation results will not only serve to evaluate the effectiveness of the program but whether it can be scaled up to capture more data.

**Results**

A final program evaluation report will be shared with all sponsors and partners to track the progress of the program. This report will be especially helpful for the Packer Health Clinic as they determine if the program is viable to continue to expand the oral health education of rest of their schools. Additionally, the results will be disseminated throughout the community to facilitate additional support from the community.

**Organizational Information** (Organizational Chart Appendix 3)

The BRECHAS Pilot program has an array of qualified individuals committed to success. The BRECHAS team is a crucial piece in connecting the Advisory Board and community partners. The bio sketches of some of the key personnel can be found below:

- o *Allison Carmona, DMD, and MPH:* Dr. Carmona is an Associate Professor of Pediatric Dentistry at the Dental College of Georgia. She is on the Board of Directors at LCFG. She will serve as the Principal Investigator (PI) in the Pilot Program. With over 20 years of extensive research experience in addressing disparities in the Hispanic community regarding oral health, she has led various health initiatives and projects nationwide throughout the years. She is a passionate advocate for oral health in Hispanic communities. She is fluent in Spanish and has worked

internationally, in countries such as Mexico and Spain. Dr. Carmona will oversee the logistics, planning, recruitment of dental students, and data collection of the Pilot Program part time. She will also be responsible for budgeting and overseeing the creation and delivery of the educational material.

- *Marcus Swift, MBA:* As a Project Manager, Mr. Swift has over 10 years of experience managing different minority initiatives and interventions in the state of Georgia. He will assist the Program Director with program oversight regarding budget management, planning and development of oral health materials (pamphlets, surveys questions...etc.) and Telehealth meeting logistics full time. Mr. Swift will work closely with the PI to create the 15 minute telehealth presentation for the dental students. He will also serve as a liaison between the Stakeholders, the Schools and Advisory Committee.
- *Eliana C. Simmons, MS:* Mrs. Simmons has been a Case Manager for the last 10 years for the Colquitt County Schools. She has vast experience in working with teachers, parents / legal guardians and the local Health Department. She will be responsible for all communication with the parents / legal guardians including follow up enrollment. Mrs. Simmons will be an important key contact to enroll the children to the S-BSP. She will work closely with community partners such as Churches and Companies. She will be working full time in the Pilot Program.
- *Carlos Gomez:* Mr. Gomez has over 20 years of experience in Information Technology (IT) and Information Security Systems. He worked for the California Telehealth Network for various years, supporting several pilot telehealth programs. He will be responsible for providing Information Technology support during the beginning stages of the Pilot Program to ensure smooth operation. Mr. Gomez will



train a Junior IT specialist to provide technical support during the oral health conference meetings. His responsibilities will mainly be during the initial stages of the program.

- *Bilingual Pediatric Dental Student from DCG (TBD)*: A Pediatric dental student will present via video conference and answer any questions regarding oral health.
- *Bilingual Registered Dental Hygienist (TBD)*: The Hygienist will be in the room during the conference call to facilitate the video conference call and answer any additional concerns.
- *Bilingual Junior Epidemiologist (TBD)*: A contract Junior Epidemiologist will be in charge of coding the data from the focus groups and surveys. This person will find patterns and trends within the data.
- *Volunteers (TBD)*: A team of bilingual volunteers will help Mrs. Simmons in contacting the parents / legal guardians to schedule the meeting and focus groups in addition to following up with them regarding the S-BSP.

**Funding Requested**

**Budget**

Table 9: Total Program Budget September 2018 - April 2021			
Budget Item	9/18-8/19	9/19-8/20	8/20-4/21

Personnel			
<b>PI: Allison Carmona</b>	\$50,000	\$50,000	\$25,000
<b>PM: Marcus Swift</b>	\$45,000	\$45,000	\$22,500
<b>Case Manager: Eliana Simmons</b>	\$30,000	\$30,000	\$15,000
<b>IT: Carlos Gomez</b>	\$15,000	\$0	\$0
<b>Junior IT</b>	\$0	\$0	\$10,000
<b>Junior Epidemiologist</b>	\$0	\$0	\$10,000
<b>Dental Student</b>	\$15,000	\$15,000	\$7,500
<b>Bilingual Hygienist</b>	\$30,000	\$30,000	\$15,000
Software	\$10,000	\$0	\$0
Equipment + Maintenance	\$10,000	\$5,000	\$0
Additional Costs			
<b>Educational Materials (Surveys, Booklets, Printing)</b>	\$8,000	\$8,000	\$4,000
Focus Group Incentive <b>(\$10,\$15 and \$20/participant x 20, participants/group x 3 groups)</b>	\$200	\$300	\$400
Total Direct Costs	\$213,200	\$213,300	\$94,400
F&A (28.2% x Direct Costs)	60,122	60,151	26,621
Total Direct + Indirect Costs for 30 Month Program	273,322	273,450	121,021

## **Budget Justification Narrative**

This proposal requests \$668,179 for a 30-month program, amounting to approximately \$273,579 for the first and second year. For the last six months the amount requested will be \$121,021. All listed personnel are considered full-time employees of BRECHAS and will receive benefits (medical, dental, PTO). With the exception of the statistician and IT contractor, the effort for all personnel is distributed evenly throughout the length of the 30-month program. The effort of the Junior Epidemiologist will be concentrated during the three month period allotted in the program timeline for data analysis.

Costs, including educational materials, equipment and Software, are the best reasonable estimate for the expansion and adaptation the telehealth program. Costs may vary depending on primary materials used. The cost of the maintenance of the equipment will be included with the equipment cost.

# Attachments

## Attachment 1: Rural ID Eligibility

### Rural ID Eligibility Headings:

- Name of Site – Cox Elementary
- Street Address – Moultrie, GA 31768.
- County – Colquitt.
- Is this a Telehealth Network Rural Originating site or Destination site? Yes
- Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)?  
Yes/No
- Do application attachment contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No

### Rural ID Eligibility Headings:

- Name of Site – Okapilco Elementary
- Street Address – Moultrie, GA 31768
- County – Colquitt.
- Is this a Telehealth Network Rural Originating site or Destination site? Yes
- Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)?  
Yes/No
- Do application attachment contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No

### Rural ID Eligibility Headings:

- Name of Site – Sunset Elementary
- Street Address – Moultrie, GA 31768
- County – Colquitt.
- Is this a Telehealth Network Rural Originating site or Destination site? Yes
- Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)?  
Yes/No
- Do application attachment contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No

### Rural ID Eligibility Headings:

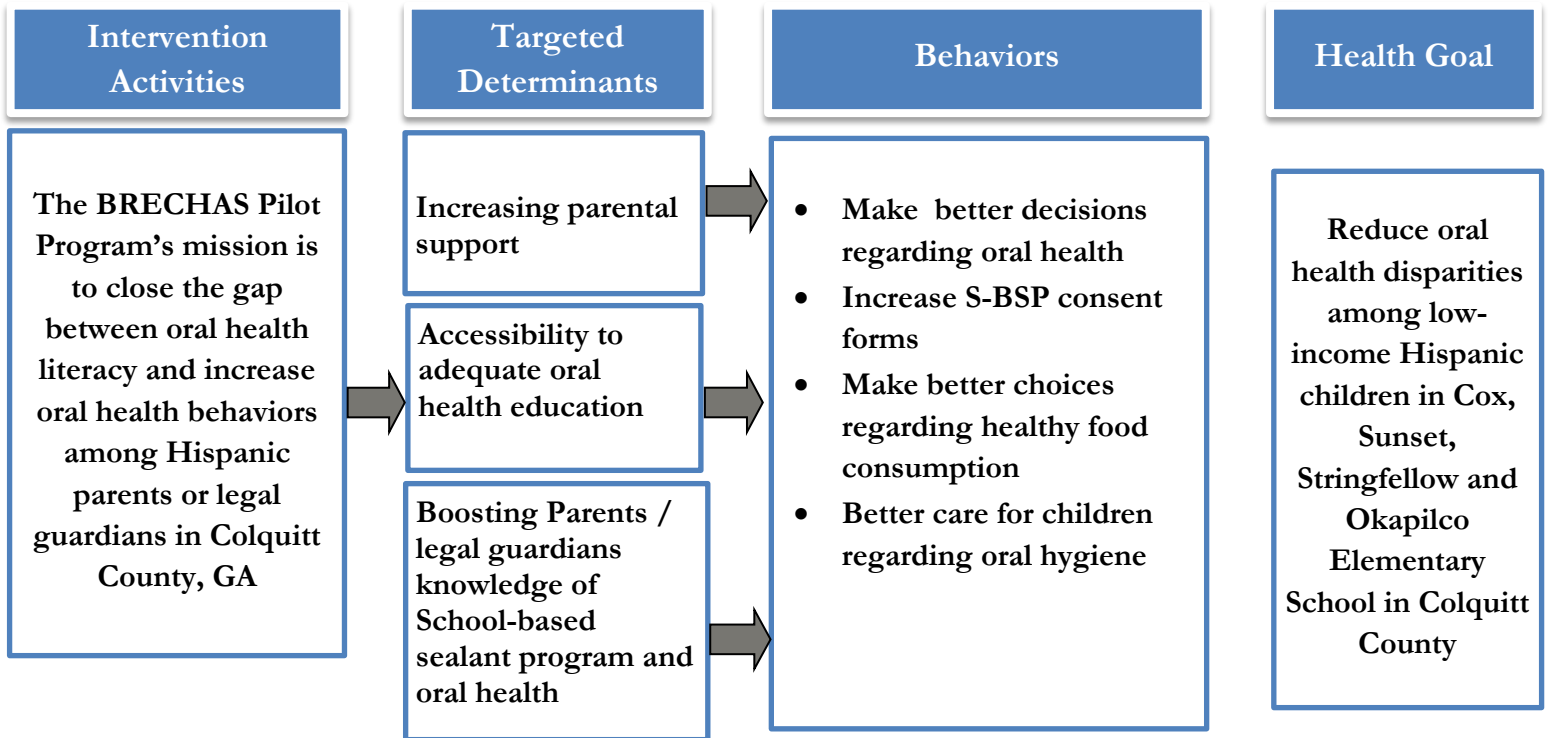
- Name of Site – Stringfellow Elementary
- Street Address – Moultrie, GA 31768
- County – Colquitt.
- Is this a Telehealth Network Rural Originating site or Destination site? Yes
- Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)?  
Yes/No
- Do application attachment contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No

## Attachment 2: Work Plan

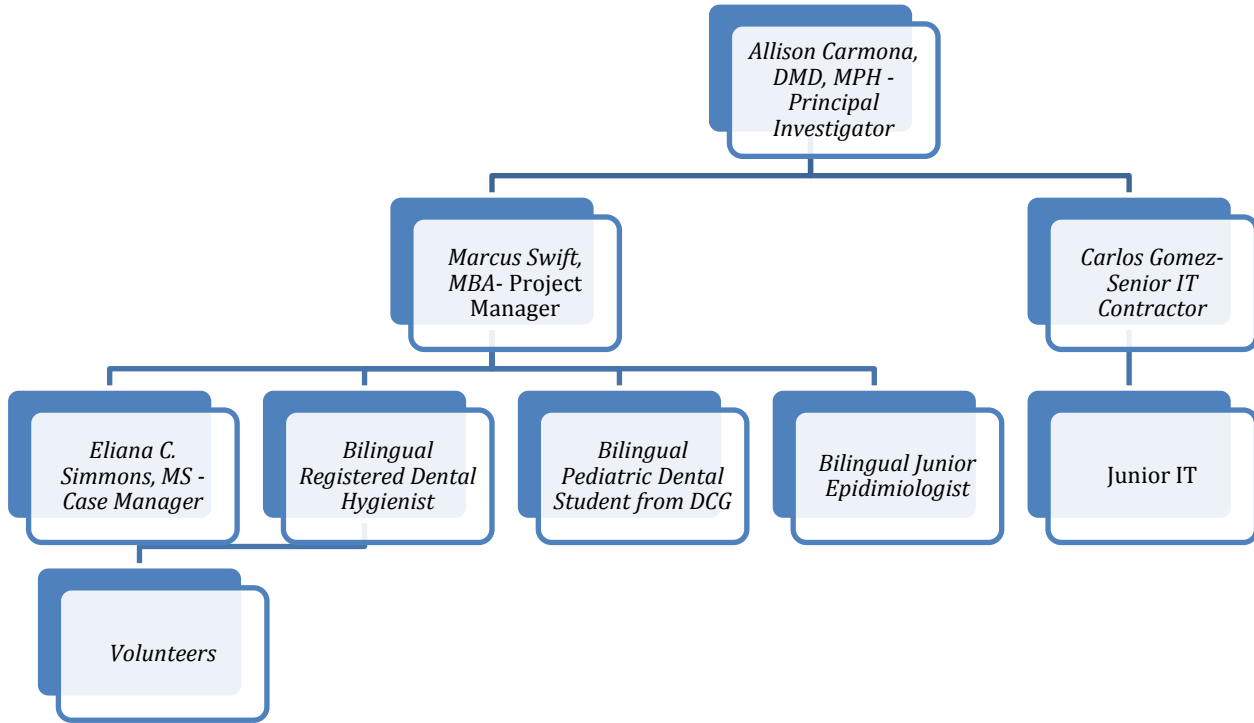
Table 10: Project Activities and Timeline			
Activity	Responsible Party	Start Date	End Date
Creation of Advisory Committee	BRECHAS (PI and Project Manager)	September 2018	October 2018
Logistics and Planning	BRECHAS Team / Advisory Committee	October 2018	November 2018
Meetings with schools and community partners	BRECHAS TEAM (PI, PM)	October 2018	November 2018
Development and Planning of written material	BRECHAS Advisory Committee	November 2018	December 2018
Buying equipment	BRECHAS Team	January 2019	February 2019
Plan meetings with pediatric dental students to create script for video conference	BRECHAS Team / Dental College of GA	January 2019	February 2019
Setting up infrastructure at the schools	BRECHAS TEAM/ The Georgia Partnership Telehealth Program	February 2019	April 2019

Set meeting with Packer clinic to make sure that we can use their resources for the launch date	PM / Packer Clinic	TBD	TBD
Plan Revisions (if needed)	BRECHAS Advisory Committee	April 2019	April 2019
Create Baseline Surveys	BRECHAS Team	March 2019	April 2019
Outreach at school's open house	BRECHAS Team / Elementary school contact	March 2019	March 2019
Recruitment / Enrollment of Parents	BRECHAS (Case manager and volunteers)	April 2019	April 2019
First Focus Group	BRECHAS Team (PM)	July 2019	July 2019
Launch date (First Telehealth Meeting) Hand pre-survey	BRECHAS Team/ Dental College of GA	August 2019	August 2019
Post-project Surveys and Focus Groups midterm focus group	BRECHAS Team (PM)	November 2019	November 2019
Last focus group	BRECHAS Team	January 2020	January 2020
Data Analysis	Junior Epidemiologist	February 2020	May 2020
Program Evaluation and Final Program Report	BRECHAS Team	August 2020	September 2020

### Attachment 3: Logic Model



## Attachment 4: Organizational Chart





## Attachment 5: Letter of Support



October 31<sup>st</sup>, 2018  
Allison Carmona D.M.D., M.P.H.  
Latino Community Fund Georgia (LCFG)  
3299 North Decatur Rd, Atlanta, GA 30031

Dear Allison Carmona,

I write on behalf of the Packer Health Clinics partnership in support of the LCFG proposal to the Health Resources and Services Administration for a grant to fund the BRECHAS pilot program to educate Hispanic parents regarding oral health in Colquitt county Georgia. We strongly support this grant application and the focus on providing the necessary guidance and equipment to create a strong telehealth network.

As an organization, we have worked together in various outreach events to target the Hispanic community in Colquitt County. Through this letter, we acknowledge specific roles and responsibilities we will fulfill in this partnership. In the event this proposal is funded, we would expect our role in the BRECHAS pilot program to include:

- Provide telehealth equipment
- Provide Guidance regarding telehealth

Latino Community Fund Georgia will take responsibility to lead the BRECHAS pilot program initiative to expand two of the school-based centers to include oral health conferences in Spanish as well as implement two new centers from the ground up. We look forward to working with you in educating the Hispanic community regarding oral health and lowering the oral health disparities and achieving health equity.

Sincerely,

Nicole Gilbert  
Packer Health Clinics President

# Appendices

## Appendix 1: Focus Group Questions

**Instrument Title: Discussion Guide: Focus Group (FG)**

**FG 1: Total Participant time required: Date**

Total focus group time: 1 hour + 30 minutes

Break:

**FG 2: Total participant time required: Date**

Total focus group time: 1 hour + 30 minutes

Break:

**Issues for focus group exploration:**

### **I. Introduction (10 m)**

- Welcome participants and introduce yourself
- Explain the general purpose of the discussion and why the participants were chosen
- Discuss the purpose and process of focus groups
- Explain the presence and purpose of recording equipment and introduce observers
- Outline general ground rules and discussion guidelines such as the importance of everyone speaking up, talking one at a time, and being prepared for the moderator to interrupt to assure that all the topics can be covered
- Review breaks schedule and where the restrooms are
- Address the issue of confidentiality.
- Inform the group that information discussed is going to be analyzed as a whole and that participant names will not be used in any analysis of the discussion
- Read a protocol summary to the participants



Preguntas de Grupo (Focus group questions)

Part 2

1. Que sabes acerca de la salud oral? (What do you know about oral health?)
2. Que cosas has escuchado sobre BRECHAS? (What things have you heard regarding BRECHAS?)
3. Cuales son algunas tradiciones que se hacen en tu familia sobre la salud oral? (What are some of the traditions in your family regarding oral health?)
4. Cuales son sus actitudes o creencias sobre la salud oral? (What are the attitudes and beliefs of oral health?)
5. Que Sabes sobre el programa de sellantes de Georgia? (What do you know about the sealant program in Georgia?)
6. Esta tu hijo en el programa de sellantes de Georgia? Si no esta por favor explica porque
7. Que cosas has aprendido con BRECHAS? (What have you learned with BRECHAS)
8. Cuales son las cosas que te gustan de BRECHAS hat is the level of acceptability surrounding regarding BRECHAS?
9. Le ha dicho a sus hijos, amigos o familia acerca de las cosas que ha aprendido con BRECHAS? (Have respondents spoken with their children or friends and family regarding the things that you have learned at BRECHAS?)
10. Cuales son sus actitudes o creencias sobre la salud oral? (What are the attitudes and beliefs of oral health?)
11. Cuales son las cosas que BRECHAS podria hacer mejor? (What are the things that BRECHAS could do better)
12. Cuales son algunos de los problemas que vez en tu familia relacionado con la salud oral?
13. Tienes preguntas acerca de BRECHAS o alguna cosa relacionada con la salud oral?

## Appendix 2: Consent Form – Videoconference (Translated to Spanish)

### INFORMED CONSENT RELEASE – Videoconference

Investigator:

"My name is Dr. Allison Carmona, and I am the Principal Investigator for the BRECHAS Telehealth Pilot Program. I am inviting you to participate in the program. Involvement in the program is voluntary, so you may choose to participate or not. I am now going to explain the program to you. Please feel free to ask any questions that you may have about the research; I will be happy to explain anything in greater detail.

"I am interested in learning more about your perception regarding oral health. You will be asked to take a pre and post survey and participate in a videoconference. This will take approximately 15mins of your time. All information will be kept confidential.

This information should help us to identify the overall knowledge of oral health in the Hispanic community. If you do not wish to continue, you have the right to withdraw from the program, without penalty, at any time."

Participant - "All of my questions and concerns about this study have been addressed. I choose, voluntarily, to participate in this research project. I certify that I am at least 18 years of age [or have a signed parental consent form on file with the \_\_\_\_\_ department].

\_\_\_\_\_  
Print name of participant

\_\_\_\_\_  
Signature of participant

\_\_\_\_\_  
date

\_\_\_\_\_  
Print name of investigator

\_\_\_\_\_  
Signature of investigator

\_\_\_\_\_  
date

## Appendix 4: Consent Form Focus Groups (Translated to Spanish)

### INFORMED CONSENT RELEASE – Focus Group

Investigator:

"My name is Dr. Allison Carmona, and I am the Principal Investigator for the BRECHAS Telehealth Pilot Program. I am inviting you to participate in the BRECHAS focus group. Involvement in the program is voluntary, so you may choose to participate or not. I am now going to explain the program to you. Please feel free to ask any questions that you may have about the research; I will be happy to explain anything in greater detail.

"I am interested in learning more about your perception regarding oral health. You will be asked to answer a few questions and discuss with other participants. This will take approximately 15mins of your time. All information will be kept confidential.

This information should help us to identify the overall knowledge of oral health in the Hispanic community. If you do not wish to continue, you have the right to withdraw from the program, without penalty, at any time."

Participant - "All of my questions and concerns about this study have been addressed. I choose, voluntarily, to participate in this research project. I certify that I am at least 18 years of age [or have a signed parental consent form on file with the \_\_\_\_\_ department].

\_\_\_\_\_  
Print name of participant

\_\_\_\_\_  
Signature of participant

\_\_\_\_\_  
date

\_\_\_\_\_  
Print name of investigator

\_\_\_\_\_  
Signature of investigator

\_\_\_\_\_  
date

## Appendix 5: Baseline Survey



### Cuestionario (Baseline Survey)

El siguiente cuestionario colectara informacion acerca de su conocimiento sobre la salud oral. La informacion recolectada se usara solo para los propósitos de este programa y sera guardada en un lugar seguro.

The following survey will collect information regarding your oral health knowledge. The information collected will only be used for this program and will be safely stored.

Fecha (Date):

Nombre de la Escuela (School Name):

Nombre del Padre, Madre o Pariente (Name of the Parent / Legal Guardian):

Nombre de los Niños (Name of children):

Por favor circule Verdadero (V) o Falso (F) para las proximas preguntas.

#### Part 1

1. Los dientes de tus hijos tienen que lavarse o cepillarse dos veces por día. V/F  
A child's teeth should be brushed or cleaned at least twice a day. T / F
2. No hay necesidad de ir al dentista si tu hijo no tiene ningun problema en sus dientes. V/F  
There's no need to go to the dentist unless children have a problem with their teeth. T / F
3. Compartir cepillo de dientes con tu hijo es malo para los dientes de tu hijo. V/F  
Sharing a toothbrush with your child is bad for a child's teeth. T / F
4. Las caries son causadas por germen en la boca. V/F  
Cavities are caused by germs in the mouth. T / F
5. Los sellantes son buenos para tu hijo. V/F  
Sealants are good for your child. T / F
6. Las sodas son malas para los dientes de tus hijos. V/F  
Drinking soda is bad for a child's teeth. T / F
7. Los niños de 6 años o mas se pueden cepillar los dientes solos. V/F  
A child can brush his/her teeth by himself/herself at age six or older. T / F

#### Part 2

1. Que sabes acerca de la salud oral? (What do you know about oral health?)
2. Que cosas has escuchado sobre BRECHAS? (What things have you heard regarding BRECHAS?)
3. Cuales son algunas tradiciones que se hacen en tu familia sobre la salud oral? (What are some of the traditions in your family regarding oral health?)
4. Cuales son sus actitudes o creencias sobre la salud oral? (What are the attitudes and beliefs of oral health?)
5. Que Sabes sobre el programa de sellantes de Georgia? (What do you know about the sealant program in Georgia?)
6. Esta tu hijo en el programa de sellantes de Georgia? Si no esta por favor explica porque.

## Appendix 6: Post-Survey



### Questionario Final (Post-Survey)

El siguiente cuestionario colectara informacion acerca de su conocimiento sobre la salud oral. La informacion recolectada se usara solo para los propósitos de este programa y sera guardada en un lugar seguro.

The following survey will collect information regarding your oral health knowledge. The information collected will only be used for this program and will be safely stored.

Fecha (Date):

Nombre de la Escuela (School Name):

Nombre del Padre, Madre o Pariente (Name of the Parent / Legal Guardian):

Nombre de los Niños (Name of children):

Por favor circule Verdadero (V) o Falso (F) para las proximas preguntas. Please circle True (T) or False (F)

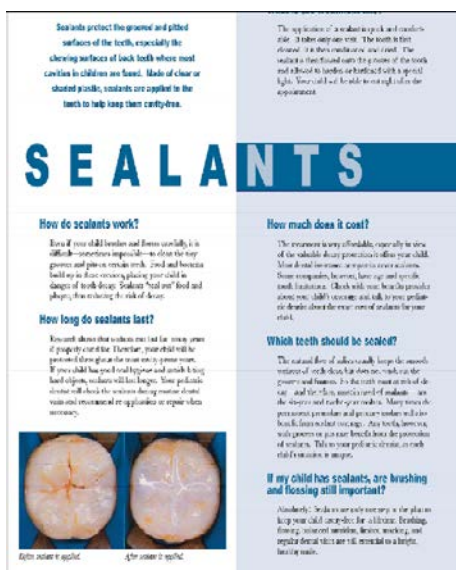
#### Part 1

1. Los dientes de tus hijos tienen que lavarse o cepillarse dos veces por día. V/F  
A child's teeth should be brushed or cleaned at least twice a day. T / F
2. No hay necesidad de ir al dentista si tu hijo no tiene ningun problema en sus dientes. V/F  
There's no need to go to the dentist unless children have a problem with their teeth. T / F
3. Compartir cepillo de dientes con tu hijo es malo para los dientes de tu hijo. V/F  
Sharing a toothbrush with your child is bad for a child's teeth. T / F
4. Las caries son causadas por gérmenes en la boca. V/F  
Cavities are caused by germs in the mouth. T / F
5. Los sellantes son buenos para tu hijo. V/F  
Sealants are good for your child. T / F
6. Las sodas son malas para los dientes de tus hijos. V/F  
Drinking soda is bad for a child's teeth. T / F
7. Los niños de 6 años o mas se pueden cepillar los dientes solos. V/F  
A child can brush his/her teeth by himself/herself at age six or older. T / F

#### Part 2

1. Que cosas has aprendido con BRECHAS? (What have you learned with BRECHAS)
2. Cuales son las cosas que te gustan de BRECHAS hat is the level of acceptability surrounding regarding BRECHAS?
3. Le ha dicho a sus hijos, amigos o familia acerca de las cosas que ha aprendido con BRECHAS? (Have respondents spoken with their children or friends and family regarding the things that you have learned at BRECHAS?)
4. Cuales son sus actitudes o creencias sobre la salud oral? (What are the attitudes and beliefs of oral health?)
5. Cuales son las cosas que BRECHAS podria hacer mejor? (What are the things that BRECHAS could do better)

## Appendix 7: Pamphlets (In Spanish)



## Reference page

- Agili, D,E., Griffin, S,O.(2015). Effect of Family Income on the Relationship Between Parental Education and Sealant Prevalence, National Health and Nutrition Examination Survey, 2005–2010. *Prev Chronic Dis*; 12:150037. DOI: <http://dx.doi.org/10.5888/pcd12.150037>.
- American Academy of Pediatric Dentistry. (2011). Preventive Dentistry. Retrieved on October 30, 2018 from [http://digital.ipcprintservices.com/publication/?m=17248&l=1#{%22issue\\_id%22:64409,%22page%22:2}](http://digital.ipcprintservices.com/publication/?m=17248&l=1#{%22issue_id%22:64409,%22page%22:2})
- American Dental Association. (2018). Mouth Healthy. Retrieved on September 12, 2018 <https://www.mouthhealthy.org/en/az-topics/d/decay>
- American Psychological Association. (2018). Socio Economical Status. Retrieved on September 12, 2018 <http://www.apa.org/topics/socioeconomic-status/>
- Archway Partnership. (2018). University of Georgia. Communities. Colquitt County. Retrieved on October 30, 2018 from <http://www.archwaypartnership.uga.edu/communities/colquitt-county/>
- ASTDD (2014). Georgia Oral Health Program: Dental Public Health Activity Descriptive Summary. Retrieved June 1, 2018 from [https://www.astdd.org/statepractices/SUM12006GAsbdsprogram\\_1\\_2014.pdf](https://www.astdd.org/statepractices/SUM12006GAsbdsprogram_1_2014.pdf)
- Canadian Dental Association.(2018).Oral diseases. Retrieved on September 12, 2018 [https://www.cda-adc.ca/en/oral\\_health/talk/complications/diseases/](https://www.cda-adc.ca/en/oral_health/talk/complications/diseases/)
- Cao,S., Gentili, M., Griffin, P M., Griffin, S O., Serban, N.(2017). Disparities in Preventive Dental Care Among Children in Georgia. *Prev Chronic Dis* 2017;14:170176. DOI: <http://dx.doi.org/10.5888/pcd14.170176>
- Cao, S., Gentili, M., Griffin, P. M., Griffin, S. O., Harati, P., Johnson, B., Tomar, S. (2015). Estimating Demand for and Supply of Pediatric Preventive Dental Care for Children and Identifying Dental Care Shortage Areas, Georgia, 2015. *Public Health Reports*,132(3), 343-349. doi:10.1177/0033354917699579
- Centers for Disease Control and Prevention (CDC). (2016).Oral Health. Retrieved January 04, 2018 from[https://www.cdc.gov/oralhealth/dental\\_sealant\\_program/sealants.htm](https://www.cdc.gov/oralhealth/dental_sealant_program/sealants.htm)
- Center for Collected Health Policy. (n.d.). What is telehealth? Retrieved on January 05, 2018 from <http://www.cchpca.org/what-is-telehealth>
- Colgate. (2018) Dental Sealants. Retrieved on September 12, 2018 <https://www.colgate.com/en-us/oral-health/procedures/sealants/dental-sealants>
- Children’s Dental Sealant Project (2014). Dental Sealants: Proven to Prevent Tooth Decay A Look at Issues Impacting the Delivery of State and Local School-Based Sealant Programs. Centers



- for Disease Control and Prevention. Retrieved on September 12, 2018 from <https://www.cdhp.org/resources/314-dental-sealants-proven-to-prevent-tooth-decay>
- Children's Healthcare of Atlanta.(n.d.).Telemedicine. Retrieved on October 27, 2018 from <https://www.choa.org/~media/files/Childrens/medical-services/telemedicine/telemedicine-site-map.pdf>
- Colquitt Regional Medical Center (2015). Telehealth Services coming to Colquitt County Schools. Retrieved on September 30, 2018 from <https://colquittregional.com/about/news/TeleHealth-Services-Coming-to-Colquitt-County-Schools>
- Colquitt County Population. (2017). Retrieved on October 30, 2018 from <http://worldpopulationreview.com/georgia-counties/colquitt-county/>
- Colquitt County Schools (2018). Closer look. Retrieved on September 28, 2018 from <http://colquitt.k12.ga.us/About-Us/A-Closer-Look>
- County Health Rankings. (2018). Georgia. Colquitt. Retrieved on September 28, 2018 from <http://www.countyhealthrankings.org/app/georgia/2018/rankings/colquitt/county/outcomes/overall/snapshot>
- Dinesen, B., Nonnecke, B., Lindeman, D., Toft, E., Kidholm, K., Jethwani, K., Nesbitt, T. (2016). Personalized Telehealth in the Future: A Global Research Agenda. *Journal of Medical Internet Research*, 18(3), e53. Retrieved on February 12, 2018 from <http://doi.org/10.2196/jmir.5257>
- Dye, B,A., Thornton-Evans, G., Li, X., Iafolla, T,J.(2015).Dental caries and sealant prevalence in children and adolescents in the United States, 2011–2012. NCHS data brief, no 191. Hyattsville, MD: National Center for Health Statistics. <https://www.cdc.gov/nchs/data/databriefs/db191.pdf>
- Dye, B. A., Mitnik, G. L., Iafolla, T. J.,Vargas, C. M. (2017). Trends in dental caries in children and adolescents according to poverty status in the United States from 1999 through 2004 and from 2011 through 2014. *The Journal of the American Dental Association*,148(8). <http://doi:10.1016/j.adaj.2017.04.013>
- FDI World Dental Federation (2018).FDI's definition of oral health. Retrieved on September 18, 2018 from <https://www.fdiworlddental.org/oral-health/fdi-definition-of-oral-health>.
- Federal Register (2000). Health Resources and Services Administration. Lists of Designated Primary Medical Care, Mental Health, and Dental Health Professional Shortage Areas. Retrieved on September 30, 2018 from <https://www.federalregister.gov/documents/2000/09/15/00-22682/lists-of-designated-primary-medical-care-mental-health-and-dental-health-professional-shortage-areas>  
[file:///C:/Users/vsandoval/Downloads/NHSC Appr Site List.pdf](file:///C:/Users/vsandoval/Downloads/NHSC_Appr_Site_List.pdf)
- Georgia Department of Public Health (GDPH) (2017). Oral Health Program. Retrieved on January 20, 2018 from <https://dph.georgia.gov/OralHealth>

- Georgia Department of Public Health (GDPH)(2016). Children Enjoy Healthy Smiles through School-based Teledentistry Clinics. Retrieved on September 28, 2018 from <https://dph.georgia.gov/blog/2016-01-08/children-enjoy-healthy-smiles-through-school-based-teledentistry-clinics>
- Georgia Info (2018). Colquitt County. Retrieved on September 28, 2018 from <https://georgiainfo.galileo.usg.edu/topics/counties/colquitt>
- Georgia Fiscal Year Free and Reduced Lunch School Data Qualified Schools (2016). Retrieved on September 28, 2018 from <http://dec.al.gov/documents/attachments/16FreeRedQualSchools.pdf>
- Georgia School Reports. (n.d.). Cox Elementary School . Retrieved on October 20, 2018 from <https://schoolgrades.georgia.gov/Cox-elementary-school>
- Georgia School Reports. (n.d.). Okapilco Elementary School . Retrieved on October 20, 2018 from <https://schoolgrades.georgia.gov/Okapilco-elementary-school>
- Georgia School Reports. (n.d.). Stringfellow Elementary School . Retrieved on October 20, 2018 from <https://schoolgrades.georgia.gov/stringfellow-elementary-school>
- Georgia School Reports. (n.d.). Sunset Elementary School . Retrieved on October 20, 2018 from <https://schoolgrades.georgia.gov/sunset-elementary-school>
- Glassman, P., Harrington, M., Mertz, E., & Namakian, M. (2012). The virtual dental home: implications for policy and strategy. *Journal of the California Dental Association*, 40(7), 605-11. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3477859/>
- Glick, M., Williams, D. M., Kleinman, D. V., Vujicic, M., Watt, R. G., Weyant, R. J. (2016). A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health. *The Journal of the American Dental Association*, 147(12), 915-917. Retrieved September 18, 2018 from <http://doi:10.1016/j.adaj.2016.10.001>
- Griffin, S., Barker, L., Wei, L., Li, C., Albuquerque, M., Gooch, B.(2014). Use of Dental Care and Effective Preventive Services in Preventing Tooth Decay Among U.S. Children and Adolescents - Medical Expenditure Panel Survey, United States, 2003–2009 and National Health and Nutrition Examination Survey, United States, 2005–2010. Retrieved April 24<sup>th</sup>, 2017 from <https://www.cdc.gov/mmwr/preview/mmwrhtml/su6302a9.htm>
- Griffin, S. O., Wei, L., Gooch, B. F., Weno, K., Espinoza, L. (2016). Vital Signs: Dental Sealant Use and Untreated Tooth Decay Among U.S. School-Aged Children. *MMWR. Morbidity and Mortality Weekly Report*, 65(41), 1141-1145. doi:10.15585/mmwr.mm6541e1
- Health Resources & Services Administration (HRSA). (2016). Health Professional Shortage Areas (HPSAs). Retrieved on September 18, 2018 from <https://bh.w.hrsa.gov/shortage-designation/hpsas>

- Health Resources & Services Administration (HRSA) .(2017). School-Based Health Centers. Retrieved on September 28, 2018 <https://www.hrsa.gov/our-stories/school-health-centers/index.html>
- Horton, S., & Barker, J. C. (2009). RURAL MEXICAN IMMIGRANT PARENTS' INTERPRETATION OF CHILDREN'S DENTAL SYMPTOMS AND DECISIONS TO SEEK TREATMENT. *Community Dental Health*, 26(4), 216–221. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3523183/> Accessed September 18, 2018
- Health Resources & Services Administration (HRSA)(2018). About HRSA. Retrieved on September 28, 2018 from <https://www.hrsa.gov/about/index.html>
- Jackson, S. L., Vann, W. F., Kotch, J. B., Pahel, B. T., & Lee, J. Y. (2011). Impact of poor oral health on children's school attendance and performance. *American journal of public health*, 101(10), 1900-6.
- Kabore, H.J., Smith, C., Bernal, J., Parker, D., Csukas, S., Chapple-McGruder, T. (2014).The Burden of Oral Health in Georgia. Georgia Department of Public Health, Maternal and Child Health, Office of MCH Epidemiology, Georgia Oral Health Program. Retrieved April 24<sup>th</sup>, 2017 from [https://dph.georgia.gov/sites/dph.georgia.gov/files/MCH/OralH/GA%20Burden%20of%20Oral%20Health%20Report\\_061914%20NEWEST.pdf](https://dph.georgia.gov/sites/dph.georgia.gov/files/MCH/OralH/GA%20Burden%20of%20Oral%20Health%20Report_061914%20NEWEST.pdf)
- Larson A.,C. (2008). State Office of Rural Health. Georgia Farmworker Health Program. Migrant and seasonal farmworker enumeration profiles study. Georgia. Retrieved September 12, 2018 from <http://www.ncfh.org/enumeration/PDF15%20Georgia.pdf>.
- Mejia, G,C., Weintraub, J,A., Cheng, N,F., Grossman, W., Han, P,Z., Phipps, K,R., Gansky, S,A.(2010). Language and literacy relate to lack of children's dental sealant use. *Community Dent Oral Epidemiol* 2010; 39: 318–324. John Wiley & Sons A/S.
- Moultrie–Colquitt County Chamber of Commerce. (2011). The region: why we are cool. Retrieved September 12, 2018 from [http://www.moultriechamber.com/southgeorgia/region\\_why\\_we\\_are\\_so\\_cool.htm](http://www.moultriechamber.com/southgeorgia/region_why_we_are_so_cool.htm).
- National Institutes of Health (NIH). (2017). National Institute of Dental and Craniofacial Research. Seal out Tooth Decay. Retrieved on January 6, 2018 from <https://www.nidcr.nih.gov/OralHealth/Topics/ToothDecay/SealOutToothDecay.htm>
- Nichols,M., Stein, A. D., Wold, J. L. (2014). Health Status of Children of Migrant Farm Workers: Farm Worker Family Health Program, Moultrie, Georgia. *American Journal of Public Health*, 104(2), 365–370. Retrieved on September 12, 2018 from <http://doi.org/10.2105/AJPH.2013.301511>
- Renee, T. (2011). Addressing unmet oral health care needs in Michigan with a mid-level dental provider. *Michigan Journal of Social Work and Social Welfare*, Volume II, Issue I. Retrieved September 12, 2018 from

<https://deepblue.lib.umich.edu/bitstream/handle/2027.42/102596/vol1-iss1-sp11-tetrick.pdf?sequence=5>

Seal America: The Prevention Intervention. (n.d.). Preparing to Launch: Obtaining Parental Consent. Retrieved on May 8, 2018 <https://www.mchoralhealth.org/seal/step-7-3.php>.

South West Georgia, (2008). Colquitt County Community Agenda. Retrieved on October 27, 2018 from [http://www.moultriega.com/wp-content/uploads/2016/11/2008-2028-Comprehensive\\_Plan.pdf](http://www.moultriega.com/wp-content/uploads/2016/11/2008-2028-Comprehensive_Plan.pdf)

Suburban Stats. (n.d). How many people live in Colquitt County. Retrieved on September 28, 2018 from <https://suburbanstats.org/population/georgia/how-many-people-live-in-colquitt-county>

United States Census Bureau. (2017). American Fact Finder. Profile of general population and housing characteristics, Colquitt County, Georgia. Retrieved on September 12, 2018 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

United States Census Bureau (n.d.a). American Fact Finder. Selected economic characteristics 2008–2010 American Community Survey 3-year estimates. Colquitt County, Georgia. Retrieved September 12, 2018 from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

United States Census Bureau.(n.d.b). Quick Facts. Colquitt County Georgia. Retrieved on October 1, 2018 from <https://www.census.gov/quickfacts/fact/table/colquittcountygeorgia/PST045217>

United States Department of Agriculture.(n.d.).What is rural. Retrieved on September 12, 2018 <https://www.nal.usda.gov/ric/what-is-rural>

Wilson, A., Brega, A. G., Batliner, T. S., Henderson, W., Campagna, E. J., Fehringer, K., Gallegos, J., Daniels, D., Albino, J. (2013). Assessment of parental oral health knowledge and behaviors among American Indians of a Northern Plains tribe. *Journal of public health dentistry*, 74(2), 159-67. Retrieved October 29, 2018 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4065026/>

World Health Organization (WHO). (2018). Oral Health. Retrieved on September 12, 2018 from [http://www.who.int/oral\\_health/en/](http://www.who.int/oral_health/en/)

### **Table List**

Table 1A: Results of Multiple Choice Questions

Table 1: BRECHAS Self-Assessment Activities

Table 2: Proposed Pilot Program Activities

Table 3: Comparison for County, State and National Health Care Ratios

Table 4: Comparison of Health Outcomes among County, State and National level

Table 5: Proposed Target Population

Table 6: Data Collection and Analysis Plan

Table 7: Evaluation Objectives & Questions

Table 8: Data Collection Methods and Tools

Table 9: Total Program Budget September 2018 - April 2021

Table 10: Project Activities and Timeline

### **Figure List**

Figure 1A: Oral Health Definition

Figure 1: Colquitt County, GA Poverty by Race

Figure 2: Colquitt County, GA Education by Race

Figure 3: Colquitt County Languages

### **Map List**

Map 1: Moultrie Landuse Map

Map 2: Colquitt County Landuse Map

Map 3: Statewide Telemedicine Network