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:

______________________________ _______________

Faith M. Lyles Date

TeleSMILE: Implementing teledentistry through School-Based Health Centers (SBHCs) in Coffee County, GA to expand access to oral health care to rural children

By

Faith M. Lyles

Executive MPH

Prevention Science

_______________________________ _______________
Kathleen R. Miner, PhD, MPH, MCHES Date
Committee Chair

_______________________________ _______________
Trevor Niels Thomas, MPH Date
Committee Member

_______________________________ _______________
Laurie Gaydos, PhD Date
Associate Chair for Academic Affairs, Executive MPH Program

TeleSMILE: Implementing teledentistry through School-Based Health Centers (SBHCs) in Coffee County, GA to expand access to oral health care to rural children

By

Faith M. Lyles

B.S. Management

Oral Roberts University

1993

Thesis Committee Chair: Kathleen R. Miner, PhD, MPH, MCHES

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
2017

ABSTRACT

TeleSMILE: Implementing teledentistry through School-Based Health Centers (SBHCs) in Coffee County, GA to expand access to oral health care to rural children

Rural child health status remains a public health concern. Child oral health status is often influenced by where they live. Research has found that living in a rural or remote area can increase a child's risk of experiencing oral health disparities. Rural children experience more difficulties in accessing oral health care services because of barriers to access attributed to geographical location, lack of transportation, and the limited availability of dental providers. In 2012, approximately 60 percent of the total designated dental health professional shortage areas were located in rural areas. Lack of providers has resulted in rural residents having to travel long distances to locate the nearest clinic or private practice. Traditional practice settings also influence barriers to accessing oral health care in rural areas because of a current medical system designed around face-to-face interaction that has impacted rural health. Increases in health disparities among rural children have prompted health care and public health providers to seek alternative strategies to remove barriers to access.

School-Based Health Clinics (SBHCs) are located in or near a school and serve as alternative strategies to meeting the health needs of school children outside of traditional settings to provide healthcare and dental care access to rural schoolchildren experiencing health disparities. Also, advances in telecommunication technology (e.g., telephone, internet, computers) have resulted in new technologies such as telemedicine and telehealth (terms used interchangeably) and have, in many cases, eliminated the need for face-to-face interaction between provider and patient. Telehealth technologies (e.g., remote patient monitoring, mobile health, live video-conferencing, etc.) can be used to reach patients outside of office settings while maintaining some form of interaction. Telehealth's success in improving health outcomes has led to its use in other medical fields where rural patients are facing barriers to access. Teledentistry, a subset of telehealth, does not provide clinic service but uses similar technology (live video-conferencing, laptops, mobile devices) to expand access to care, which include different delivery models, such as portable and mobile clinics, fixed clinics or a combination. Teledentistry programs have become an important strategy to addressing dental provider shortages, particularly in rural areas.

Coffee County, GA, which is 67 percent rural, is designated as a health provider shortage area (HPSA) in primary care, mental health, and dental care. In 2010, 26.2 percent of the population was aged 18 and under. The expected outcomes of this proposal for the implementation of teledentistry services through existing Coffee Telehealth SBHCs include expanded access to dental cares, referrals to a dental home, and outreach activities that prevent dental disease and reduce oral health disparities among rural and minority children in Coffee County where significant dental provider shortages exist. If successful, the program also expects that this pilot program will serve as a model to integrate similar teledentistry services into the other seven Coffee Telehealth SBHCs sites.

TeleSMILE: Implementing teledentistry through School-Based Health Centers (SBHCs) in Coffee County, GA to expand access to oral health care to rural children

By

Faith M. Lyles

B.S. Management

Oral Roberts University

1993

Thesis Committee Chair: Kathleen R. Miner, PhD, MPH, MCHES

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
2017

ACKNOWLEDGEMENT

First, I give honor and glory to God for giving me the courage and strength to embark on this remarkable journey, which fulfilled my lifelong dream of getting a MPH degree. Secondly, I like to dedicate my MPH degree to my late mother, Gladys E. Lyles, a political activist who instilled in me to not only speak out against injustices and inequalities that impact me but also for future generations.

Also, I would like to acknowledge and express my deepest appreciation to my committee chair, Dr. Kathy Miner, and field advisor, Mr. Trevor Niels Thomas, for their patience and valuable guidance throughout this process, which I could not have completed without them. To my grant proposal reviewers, Ms. Andrea Pendergrass, Mr. Daniel C. Rutz, Ms. Zainab Wurie-Harvey, Ms. Maria Fontenelle, and my sister TiaJuana Shepherd, I am grateful to you for providing your time, knowledge and expertise in reviewing my thesis and grant proposal. To my co-workers and countless others, thank you for your words of encouragement, which often came when I needed to hear them the most. I am also grateful to my professors for passing on their knowledge and experiences to me and my cohorts that have equipped us with the tools to succeed in our careers. To my closest cohorts, deepest thanks for the wonderful memories we created and shared throughout this program. To my family and friends, heartfelt thanks for encouraging me to apply for the program and your prayers that kept me going. I could not have done it without your unwavering and undying support. Last, but not least, thanks to the Emory Rollins School of Public Health for a great educational environment for adult learners. In summary, thanks to everyone who has helped me complete this chapter in my life.

TABLE OF CONTENTS

Definitions 1

Abbreviations 4

CHAPTER 1 INTRODUCTION 6

Introduction 6

Telecommunication Technology and Access 7

Telehealth 8

Telemedicine 9

Teledentistry 9

Teledentistry Challenges 10

Benefits of Teledentistry 11

U.S. Teledentistry Networks 11

Problem Statement 14

Purpose Statement 15

Project Goals 15

Significance Statement 15

CHAPTER 2 REVIEW OF LITERATURE 17

Introduction 17

Review of Literature 18

Burden of Children Oral Health Disease 18

Rural Child Oral Health Status 19

Access Challenges in Rural Areas 20

Geographical Location 21

Dental Provider Shortages 21

Telemedicine and Telehealth 24

Teledentistry and Access 24
CHAPTER 3 METHODOLOGY OF THE REVIEW PROCESS 26
Description of Grant Announcement 26
Proposal Review Criteria 27
Review of Funding Agencies 30
Grant Review Process 35
Grant Proposal Reviewers 35
Protection of Human Subjects 37
CHAPTER 4 REVIEWER COMMENTS 40
Reviewer 1 Comments 40
Reviewer 2 Comments 40
Reviewer 3 Comments 44
Reviewer 4 Comments 45
Reviewer 5 Comments 47
CHAPTER 5 FINAL VERSION OF THE GRANT PROPOSAL 50
Project Abstract 50
Introduction 52
Project Narrative 55
    Overview of Telehealth Network 55
    Members 57
    Needs Assessment 58
        Health Care Needs 60
        Target Population 63
    Methodology 65
    Work Plan 66
    Resolution of Challenges 66

Evaluation and Technical Support Capacity 67

Organizational Information 69

Support Requested....................71

ATTACHMENTS 73

Attachment 1 Rural ID Eligibility....................73

Attachment 2 Proposed Budget Information....................74

Attachment 3 Work Plan 76

Attachment 4 Proposed Memorandum of Agreements and Contracts 78

Attachment 5 Biographical Sketches of Key Personnel 94

Attachment 6 Organizational Chart 98

Attachment 7 Other Documents....................99

Attachment 7.1 Proposed Patient Consent and Medical Information Release Forms 99

Attachment 7.2 Proposed Dental Provider Referral Process....................101

Attachment 7.3 Proposed Surveys....................102

Attachment 7.4 Proposed Summary Report of Dental Services....................109

REFERENCES 110

APPENDICES 116

Appendix 1 Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas...116

Appendix 2 HRSA Funding Opportunity Announcement 119

Appendix 3 Grant Reviewer Form 154

Appendix 4 HIPAA and Telehealth Compliance Guide....................156

Appendix 5 TeleSMILE Pilot Program Planning Logic Model 158

LIST OF FIGURES

Figure 1 Georgia School-Based Health Center Map 53

Figure 2 Map of Telehealth Networks in Georgia that Provide Teledentistry Services 54

Figure 3 Illustration of Rural Landscape of Coffee County, GA and Location of Municipalities 59

Figure 4 Coffee Regional Medical Center Service Areas 61

LIST OF TABLES

Table 1 Four Categories of Telehealth Technology 8

Table 2 U.S Teledentistry Networks 13

Table 3 Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas Health, 2008-2010 by Dental Occupation 22

Table 4 Review Criteria for TNGP Proposal Evaluation Process 29

Table 5 Human Resources and Services Administration's Goals and Objectives 31

Table 6 Patient Privacy Risks and Controls in Telehealth 39

Table 7 Proposed Project Program Activities 56

Table 8 Comparison of Clinical Care Providers in Coffee County, GA 60

Table 9 2016 Comparison of Health Outcomes in Coffee County, GA 61

Table 10 Target Population 63

DEFINITION OF TERMS

Access – Timely use of personal health services to achieve the best possible health outcomes.

Asynchronous Telemedicine – applications not existing or occurring at the same time.

Broadband – telecommunication in which wide band of frequencies is available to transmit information.

Budget Period – the interval of time into which the project period is divided for budgetary and reporting purposes. For this grant program, the time interval is 12 months.

Cavity – A decayed part of a tooth (a hole in the tooth).

Community-Based Program – a planned, coordinated, ongoing effort operated by a community that characteristically includes multiple interventions intended to improve the health status of the members of the community.

Dental Care – Seeing a dentist and/or **dental** hygienist for regular check-ups and cleanings to prevent dental caries and dental diseases.

Dental Caries – Tooth decay or cavities.

Dental Care Provider – A dentist, or any licensed dental professional that supports a dentist.

Dental Home - is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way.

Dental Hygienist (or oral hygienist) – a licensed dental professional, registered with a dental association, or regulatory body within their country of practice.

Dentist – a person qualified to treat the diseases and conditions that affect the teeth and gums, especially the repair and extraction of teeth and the insertion of artificial ones; a doctor oral health.

Existing Network – An existing network is a network in which individual members are currently providing and/or receiving telehealth/telemedicine services.

Federally Qualified Health Centers (FQHC) – Federally and non-Federally-funded health centers that have status as Federally-qualified health centers.

Health Centers or (Community Health Centers (CHCs) – Diverse public and non-profit organizations and programs that receive Federal funding.

Hub Site – The location of the teledental consulting provider receiving the electronic data.

Interoperability/Open Architecture – The condition achieved among telecommunication and information systems when information (i.e., data, voice, image, audio, video) is shared across acquisition, transmission, and presentation technologies, equipment and services.

Live Videoconferencing (Synchronous) – Live, two-way interaction between a person and a provider using audiovisual telecommunications technology.

Media – Refers to the material used to link computers together via a network.
Mobile Health (mHealth) – Health care and public health practice and education supported by mobile communication devices such as cell phones, tablet computers, and personal digital assistants (PDAs).

New Network – A network is one in which the individual sites are not currently collaborating to provide telehealth/ telemedicine services, but intend to do so as part of the proposed network.

Oral Diseases – The wide array of disease conditions ranging from tooth decay (dental caries) to life-threatening oral cancers.

Oral Health – The state of being free from mouth and facial pain, oral and throat cancer, oral infections 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.

Oral Health Disparities – The differences in the incidence, prevalence, mortality, and burden of oral diseases and other adverse health conditions among specific population groups.

Portable Dental Clinic – A mobile vehicle or portable dental equipment that serves as a dental safety program for people who lack the resources to acquire dental care services on their own.

Poverty – An income below a federally determined poverty threshold.

Project Period – The total time for which federal support of a discretionary project has been approved.

Remote Patient Monitoring (RPM) – Personal health and medical data collection from an individual in one location via electronic communication technologies, which is transmitted to a provider in a different location for use in care and related support.

Rural Area – Encompasses all population, housing, and territory not included within an urban area or urban cluster (categorized as completely rural or mostly rural); characterized by low human population density.

School-Based Health Center (SBHC) – A health center located in or near a school facility of a school district or board or of an Indian tribe or tribal organization that provides health services to children in accordance with State and local law, including laws relating to licensure and certification; and satisfies such other requirements as a State may establish for the operation of such a clinic.

Spoke Site – The location where the patient is receiving the service and from which data is being transmitted.

Store-and-Forward (Asynchronous) – Transmission of recorded health history through an electronic communications system to a practitioner, usually a specialist, who uses the information to evaluate the case or render a service outside of a real-time or live interaction.

Synchronous Telemedicine – Telecommunications applications occurring at the same time or in "real-time" (interactive).

Telecommunication – Communication over a distance by cable, telegraph, telephone, or broadcasting.

Teledentistry – A combination of telecommunications and dentistry involving the exchange of clinical information and images over remote distances for dental consultation and treatment planning.

Telehealth – The use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration.

Telemedicine – The use of electronic communication and information technologies to provide or support clinical care at a distance.

Tooth decay – Damage that occurs when germs (bacteria) in the mouth make acids that eat away at a tooth, which can lead to a cavity; dental caries or cavities.

Urban Area – A minimum population of 50,000 or more people; characterized by high human population density.

Urban Cluster – A minimum population of at least 2,500 and less than 50,000 people.

Rural – All counties that are not designated as parts of Metropolitan Areas (MAs) by the Office of Management and Budget (OMB) are considered rural.

Well-being – The state of being comfortable, healthy, or happy.

ABBREVIATIONS

ADA	American Dental Association
APHA	American Public Health Association
CFDA	Catalog of Federal Domestic Assistance
CHC	Community Health Centers
HHS	Health and Human Services
DQF	DentaQuest Foundation
FIPP	Fair Information Practice Principles
FOA	Funding Opportunity Announcement
FQHC	Federally Qualified Home Centers
FWA	Federalwide Assurance
GASOPHE	Georgia Society for Public Health Education
GDPH	Georgia Department of Public Health
GOSA	Governor's Office of Student Achievement
GPHA	Georgia Public Health Association
HC	Health Centers
HIPAA	Health Insurance Portability and Accountability Act
HRSA	Health Resources and Services Administration
MCHB	Maternal and Child Health Bureau
MPH	Master of Public Health
NIH	National Institute of Health
OAT	Office for the Advancement of Telehealth
ORHP	Office for Human Research Protections
PHI	Protected Health Information
PHTC	Public Health Training Center
SBHC	School-Based Health Center

SF Standard Form

TNGP Telehealth Network Grant Proposal

CHAPTER 1 INTRODUCTION

INTRODUCTION

Tooth decay is one of the most preventable childhood diseases, yet oral health care remains among the most prevalent unmet health care needs for children, especially low-income children. Research has shown that children are more likely than adults to have unmet dental needs and face barriers to care. In Georgia, about half of low-income children, aged 6 to 19 years, have untreated tooth decay *(Georgia Health Policy Center, 2007).* According to the Center for Disease Control, approximately 20 percent (1 out of 5) of children, aged 5 to 11 years, have at least one untreated decayed tooth. Oral health disparities are particularly prevalent among low-income and minority children. In 2014, over 18 million low-income children lacked dental care, including routine exams (Pew Charitable Trusts, 2016). Among children and adolescents aged 5 to 19 years, untreated tooth decay was twice as high for those living in low-income families (25 percent) than children from higher-income households (11 percent) *(Center for Disease Control, 2014).* Compared to urban residents, rural residents experience more difficulties in accessing health care services because of barriers such as geographical location, lack of transportation, lack of insurance, and a limited number of dental care providers available to treat patients. Rural children (29.3 percent) are less likely than urban children (27.5 percent) to receive preventive dental care because of these and other barriers to access *(South Carolina Rural Health Research Center, 2008).*

Additionally, research shows that minority and rural children suffer disproportionally from oral health disparities due to barriers to access *(Edelstein and Chinn, 2009).* Approximately 64 percent of Hispanic children and 60 percent of rural children have a significantly higher prevalence of tooth decay, in comparison to 50 percent of non-Hispanic children, and 48 percent of children living in urban areas *(Kabore et al, 2014).* Major barriers to access to dental care that exists among rural children have been attributed to many factors, but particularly to geographical location, availability of dental providers, and problems getting to a dental office *(Martin et al, 2008).*

The shortage of dental providers in rural areas has been cited often in literature as a significant barrier to access resulting in oral health disparities. A large percentage of rural areas are considered dental health provider shortage areas (DHPSAs). In 2012, approximately 60 percent of the designated DHPSAs were located in rural (or non-metropolitan) areas. *(Pew Charitable Trusts, 2014)*. Children living in rural areas are less likely than urban children to have dental insurance and more likely to seek care for preventable dental problems in emergency rooms *(Pew Charitable Trusts, 2016)*. These barriers to access have led to poor oral health and oral health disparities among rural children in America. Poor oral health can have a negative effect on children's quality of life and performance in school. Public health implications of the inability to access timely oral health care services have led to the death of a child due to insurance barriers that prevent early intervention *(Otto, 2007)*.

Traditional settings, such as clinics and private practices, can also influence the inability to access services for those seeking care in rural areas. The lack of transportation and travel costs to reach the nearest provider have been found to attribute to health disparities among children and underserved populations. Governments, public health, advocates and community organizations have been prompted to support alternative strategies to reduce health disparities that disproportionately impact those where traditional efforts have faltered. Over the past few decades, telecommunication technology has shown great potential in improving access to health care services for rural residents and underserved populations living in provider health shortage areas.

TELECOMMUNICATIONS TECHNOLOGY AND ACCESS

Following advances in telecommunications technologies in 1990, which includes the invention of the internet, the use of computers in healthcare was introduced by Medicare when it authorized the use of shared systems to enhance the delivery of healthcare services in the U.S. *(World Health Organization, 2010)*. This new technology ushered in the era of telehealth and telemedicine as alternatives strategies to accessing health care outside of traditional settings.

TELEHEALTH

Telehealth uses of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration. Telehealth is also defined as a collection of means or methods for enhancing health care, public health, and health education delivery using telecommunication technology *(Glassman, 2016).* It differs from telemedicine in that it is not used to provide clinical services, but primarily as a communications tool that uses video-conferencing, email, mobile device technology to collect and transmit patient data for review and diagnosis by providers *(Glassman, 2016).* Advances in technology tools (internet access, camera phones, phone applications) have increased telehealth's potential to address current challenges related barriers to access and provider shortages, particularly in rural communities and underserved populations. Telehealth technologies systems are divided into four categories: remote patient monitoring (RPM), store-and-forward, interactive telemedicine (video-conferencing), and mobile health (mHealth) as shown in **Table 1.**

Table 1 Four Categories of Telehealth Technology

Technology	**Description**
Remote Patient Monitoring	Allows immediate remote monitoring of patients in their homes using mobile medical devices to collect data.
Store-and-Forward *(Asynchronous)*	Allows providers to share patient information *(i.e., lab results)* with another provider at a different site.
Interactive Telemedicine *(Synchronous)*	Allows physicians and patients to communicate in real time *(live video)* from a patient's home or another medical facility.
Mobile Health *(mHealth)*	Uses mobile and other wireless technology in the delivery of clinical services.

TELEMEDICINE

Telemedicine uses electronic communication and information technologies to provide or support clinical care at a distance. Although telehealth and telemedicine are used interchangeably, telemedicine is the subset of telehealth that delivers health care services and education over a distance through the use of telecommunications technology. Telemedicine was first utilized to improve healthcare access among rural populations and later expanded to address workforce shortages urban areas *(American Academy of Pediatrics, 2015).* Historically, telemedicine has played an integral part in the delivery of clinical services where it was used to electronically transmit medical information electronically to providers *(Hein, 2009).* Telemedicine technology brought healthcare services to areas where underserved populations lacked access to care and social services *(Wheeler, 1999).* Similar to telehealth, telemedicine has the ability to improve access to health and dental care in rural and underserved communities *(Majerowicz and Tracy, 2010).* Also, telemedicine has decreased the need for face-to-face interaction between provider and patient as the singular way to receive medical care. Telemedicine, like telehealth, has become alternative strategies to reduce health disparities that affect low-income and underserved populations throughout the U.S. The effectiveness of telehealth and telemedicine in improving health outcomes in medicine using telecommunication technology, has guided efforts used by both technologies, in other related medical fields such as teledentistry.

TELEDENTISTRY

Teledentistry, a subspecialty of telemedicine, uses telehealth systems and approaches in the delivery of dental cares services *(American Dental Association, 2017).* The concept has been around for years but teledentistry remains a developing area of dentistry that combines telecommunication technology, the internet and digital imaging to connect dental providers with patients *(Arizona Department of Health Services, 2009).* The use of telehealth technology in teledentistry was first used by the United States Army's Total Dental Access Program *(TDA)* in 1994 to improve patient care, dental education and the communication between dentists and dental laboratories *(Rocca, 1999).*

Teledentistry, like telemedicine, was utilized by the Army to support the exchange of

information and images over remote distances for dental consultation and treatment planning *(Jampani et al, 2011)*. Teledentistry and telehealth both include the use of similar technology tools to facilitate access *(e.g., video-conferencing, wireless devices, electronic mail, etc.)*. The forms of telehealth technology most often used in teledentistry is real-time consultations and store-and-forward, which is described in **Table 1**. However, despite its potential to improve access and reduce oral health disparities, challenges exist that hinder implementation among dental care providers, especially in areas designated as DHPSAs.

TELEDENTISTRY CHALLENGES

The use of teledentistry has not been fully adopted into the dental care delivery because of perceived challenges to implementation of dental providers. However, there is significant evidence that suggests that teledentistry plays an important role in removing barriers to dental care access *(Glassman et al, 2012b)*. These perceived barriers to implementation of teledentistry in the U.S. has discouraged private dentist from fully embracing alternative strategies to improving dental care access *(Estai et al, 2016)*. The most referenced barriers attributed to hindering the implementation of teledentistry include *(Hein, 2009)*:

1. Complex collaborative processes involve support of individuals, infrastructure, and organizations;
2. Reimbursement policies of third-party payers that create uncertainty about payment for telehealth services;
3. Data security and privacy concerns;
4. High initial start-up costs;
5. Enforced restrictive licensure laws requiring teledentistry providers to obtain full licenses to practice across state lines; and
6. Limited federal funding for program implementation and sustainability.

Of the challenges referenced above, reimbursement policies are often referred also as significant obstacles to implementation. How states define telemedicine and telehealth can determine if a

provider will be reimbursed for telemedicine and telehealth services. More than 30 states, including the District of Columbia, have telehealth parity laws that require private insurance companies to reimburse providers for care delivered via telemedicine that use real-time video-conferencing, but only a few states mandate reimbursement for store-and-forward telemedicine *(American Telemedicine Association, 2017)*. Parity laws play a key role in determining which telemedicine programs will be implemented, which can influence barriers to access. Removing constraints that hinder the implementation of teledentistry may allow private dental providers and others to focus more on how it could benefit their practices and reduce oral health disparities in rural areas.

BENEFITS OF TELEDENTISTRY

Despite challenges in implementing teledentistry, studies cite many benefits in using telehealth technology, which include:

1. Improving access to oral health services in rural and remote communities;
2. Reducing oral health disparities among minorities, children, and rural and underserved populations;
3. Addressing issues related to dental provider shortages in underserved and rural areas;
4. Reducing barriers to access due to geographical location and lack of transportation;
5. Maximizing the use of existing providers by allowing remote monitoring of patients located in rural and remote areas;

For states facing significant dental providers shortages in rural areas, these benefits can be used to expand access to care to adequately serve the oral health needs of its residents.

U.S. TELEDENTISTRY NETWORKS

There is no surveillance data on the number of number teledentistry programs that exist in the United States. However, there are numerous teledentistry delivery systems have been developed and implemented that uses a variety of methods *(e.g., portable, mobile, SBHCs)* to provide disadvantaged groups and underserved populations with dental care access. (**Table 2**). Teledentistry programs have used different forms of telehealth technology to link provider-to-patients in real-time

(video-conferencing). Also, to share information with providers at a later date (*store-and-forward),* which is not interactive or performed in real-time. Store-and-forward is often the cheapest start-up costs because there is no live interaction involved, which can eliminate the high salary expense of having a licensed medical doctor or dentist present. Also, teledentistry programs are often designed based on the community and population it serves.

Apple Tree Dental, Georgia's Southeast Health District, and Finger Lakes programs both use store-and-forward to provide dental care access to children, while Georgia's Southeast Health District uses both real-time videoconferencing technology (dentist consults) and store-and-forward (dental hygienist) to serve schoolchildren and staff. In addition, Finger Lakes, which provides preventive and routine dental care to the children of farmworkers, use video-conferencing. **Table 2** describes further the services provided by the U.S. teledentistry networks that have been operating for more than 10 years.

Table 2 U.S. Teledentistry Networks

Program	Description	Established
Apple Tree Dental Minneapolis, MN	Provides oral health assessment, preventive and treatment services among Head Start children. Uses dentists, dental therapists, dental hygienists, dental assistants, and others directly employed by the organization. Allows insurance coverage for teledentistry services in public programs. Technology: *Store-and-forward teledentistry.*	2006
Georgia Dept of Public Health, Southeast Health District, Waycross, GA	Services provided in schools in each of the school districts served by the program (5 project sites). Dental hygienists speak and provide detailed oral images to a dentist. Technology: *Real-time video-conferencing technology (dentist consults) and Store-and-forward (dental hygienist).*	2006
Finger Lakes Community Health, Penn Yan, NY Eastman Institute for Oral Health, Univ. of Rochester, Rochester, NY	Serves migrant and seasonal farm workers in rural New York State. Teledentistry offered to Head Start children only. Services include oral health assessment, preventive, and treatment services. Pediatric dentist at Eastman Institute for Oral Health Rochester provides specialty consultations. Technology: *Real-time video-conferencing technology.*	2002
Pacific Center for Special Care Virtual Dental Home, Univ. of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA	Provides preventive dental care to schools, Head Start, low-income community centers and nursing homes (10 project sites). Teledentistry programs in 50 California Head Start preschools, elementary schools, community centers, residential care facilities for people with disabilities, senior centers, and nursing homes. Technology: *Store-and-forward technology.*	2010

Sources: Oral Health Workforce Research Center, 2016; Glassman et al, 2012a

The health status of rural children and other disadvantaged populations have long been impacted by barriers to accessing oral health care throughout the U.S. Telehealth technology through the use of teledentistry removes geographical barriers to access and reduces inequalities in the delivery of dental care *(National Rural Health Alliance, 2009).* Telehealth networks developed by public health, federal agencies, and public and private organizations offering teledentistry are needed to reduce oral health disparities in underserved communities.

PROBLEM STATEMENT

Child oral health is influenced by their environment *(Michael et al, 2008).* Oral health disparities among rural children are influenced by geographical location, which studies show contributes to dental provider shortages in rural areas. *(Rural Health Information Hub, 2017).* Rural areas with limited access to a provider may result in a person having to travel distances to locate the nearest provider. In 2012, approximately 60 percent of the total designated dental health professional shortage areas were located in rural areas *(Singer Cohen and Stitzel, 2015).* In 2016, Georgia was ranked 5th with 189 DHPSAs, with only 27 percent of residents' dental needs were being met *(Kaiser Family Foundation, 2016).* Despite advances in the practice of dentistry *(e.g., dental sealants, fluoride treatments, technology),* tooth decay remains the most chronic disease of childhood in the United States *(Center for Disease Control, 2014).* More than 51 million school hours are lost annually due to dental-related illness *(Department of Health and Human Services, 2000).*

Between 2011 and 2012, approximately 23 percent of children aged 2 to 5 years, and 56 percent of children aged 6 to 8 years had experienced dental caries *(Dye et al, 2012).* Oral health disparities are highest among rural children who live in low-income families. *(General Accounting Office, 2000).* According to the Center for Disease Control, children aged 5 to 19 years from low-income families are twice as likely (25 percent) to have cavities compared with children from higher-income households (11 percent) (2016). Among children aged 6 to 11 years, rural children are less likely to have a preventive dental visit than children in urban areas *(Health Resources and Services*

Administration, 2015). These disparities can result in significant differences in the oral health status of urban-rural children, which remains a public health problem.

PURPOSE STATEMENT

Geographical location and provider shortages remain obstacles that hinder access to oral health services among rural children. Consistent themes in the literature support the use of teledentistry as an alternative strategy to reduce oral health disparities, remove barriers to access, and fill gaps where dental provider shortages exist. The purpose of the grant proposal is to integrate teledentistry with existing school-based health centers providing primary care services to meet the unmet dental care needs of rural children living in Coffee County, GA where significant dental provider shortages exist.

PROJECT GOALS

The project goals of this proposal are to:

1. expand access to oral health care services using teledentistry to rural children in Coffee County, GA, a designated Dental Health Provider Shortage Area (DHPSA),
2. establish referrals to dental homes to ensure continuous care, and
3. reduce oral health disparities among rural and minority children.

SIGNIFICANCE STATEMENT

The mission of TeleSMILE Pilot Program is to provide a system of care that meets the unmet needs for oral health services of rural children living in Coffee County, Georgia. According to the School-Based Health Alliance, SHBCs are *"powerful tools for achieving health equity among children and adolescents who unjustly experience disparities in outcomes simply because of their race, ethnicity, or family income."* Although tooth decay is decreasing among children, oral health disparities remain a public health concern. Health disparities continue to disproportionately affect rural children and underserved populations. Public health and other organizations have recognized the potential of using telehealth as another option to traditional practices to remove persistent barriers to access among rural children. In Coffee County, GA, there is a significant dental provider

shortage that exists throughout the county. The TeleSMILE Pilot Program activities will focus on implementing teledentistry services through existing Coffee Telehealth SHBCs to overcome this barrier to access. If funded, the TeleSMILE Pilot Program will expand access to initial and preventive oral health care to more 2,500 rural school children, which can reduce the risk of them experiencing dental pain while learning and influence good oral health behaviors once the grant has ended.

With advancements in telecommunications technology, there are many opportunities to reduce oral health disparities and access barriers to dental care among rural children using alternative strategies. The implementation of teledentistry programs have shown to play an important role in removing geographical barriers to access in rural and underserved communities throughout the U.S. Without new approaches to public health problems concerning the lack of access to dental care services, oral health disparities will continue to have serious health consequences on rural child health status, which can continue into adulthood. Addressing teledentistry challenges that impede implementation like removing regulatory barriers, and increasing funding for sustainability may encourage more private dental providers to use teledentistry to remove barriers that hinder. Thereby, improving rural children oral health status.

CHAPTER 2 REVIEW OF LITERATURE

INTRODUCTION

The U.S. Surgeon General noted the importance of oral health to overall health and well-being in the 2000 Oral Health in America: A Report of the Surgeon General by declaring, "You can't be healthy without good oral health" *(Department of Health and Human Services, 2000)*. Since then, there have been improvements in the practice of dentistry (dental sealants, water fluoridation), but tooth decay remains prevalent among young children. In 2016, 1-in-4 children had untreated cavities *(National Institute of Dental and Craniofacial Research, 2014)*. Children living in rural and remote communities experienced more health-related disparities when compared to urban children because of the lack of access to care *(Health Resources and Services Administration, 2015)*. Rural children represent 21 percent of all children, and 31 percent of the total rural population in the U.S. *(Clark et al, 2001)*.

Persistent and systemic challenges accessing oral health care is often associated with significant increases in oral health disparities among rural children *(Bolin et al, 2015)*. Rural children (23 percent) are less likely than urban children (22 percent) to have received dental care in the previous year due to limited access to dental care *(South Carolina Rural Health Research Center, 2012)*. There have been numerous efforts to improve access to dental care and reduce oral health disparities among rural children that involve transforming the delivery of dental services *(Beck, 2016)*. Teledentistry is one of these efforts that has shown the potential as an innovative alternative strategy. Teledentistry has been used to assist with these efforts through the use of telecommunication technology (e.g., video-conferencing, facsimile, internet, etc.) and dentistry. Several evidence-based practices in multiple states have integrated teledentistry into their telehealth network to improve access to dental care outside of the traditional office settings. As a result, millions of rural children and underserved populations with limited access to dental care or other needed services (e.g., behavioral and social services) have received access to care.

REVIEW OF LITERATURE

In order to gain a better understanding of oral health disparities among rural children, a literary review was conducted on the topic of barriers to accessing oral health care services in rural areas and rural child health status. PubMed, Google, and Google Scholar were the primary search engines used to conduct the review, as well as reference lists in articles, to find additional articles for the review. Several keywords and phrases were used during the search included: access, barriers, child/children, dental care, dental provider, shortages, disparities, oral health, rural areas, rural health, teledentistry, telehealth, and telemedicine. Over 40 abstracts were reviewed to determine if the articles were relevant to the specific topic. If the peer-reviewed article or literature was relevant, it was included in the review of the literature.

BURDEN OF CHILDREN ORAL HEALTH

Although preventable, tooth decay is the most chronic disease of children aged 5 to 17 years and remains more common than asthma and obesity *(Department of Health and Human Services, 2000).* The burden of oral health disease is a global problem because it not only impact individuals but society as well *(World Health Organization, 2012).* In 2015, the U.S. spent $117.5 billion for dental care services *(Centers for Medicaid and Medicare Services, 2017).* Poor oral health impacts a child's attendance and performance in school *(Jackson et al, 2011)*, and account for lost work hours for parents *(Welch, 2015).*

Oral health disease is particularly high among children living in poor and underserved populations (Petersen, 2004). Poor oral health early childhood can compromise the health and well-being of children. Dental diseases have been linked to ear and sinus infections, weakened immune systems, diabetes, heart disease, malnutrition, fatal infections, and other serious health conditions *(National Institute of Dental and Craniofacial Research, 2014).* According to the 1999-2004 National Health and Nutrition Examination Survey (NHANES), 42 percent of children aged 2 to 11 years have experienced dental caries in their primary teeth. The burden of oral health disease affects a child's ability to eat, smile, and communicate, which affects their overall health and quality of life

(Ramos-Jorge et al, 2014). Adequate and timely access to oral health care is a persistent issue in rural health *(Health Resources and Services Administration, 2014).*

RURAL CHILD ORAL HEALTH STATUS

There are gaps that exist regarding the oral health status of rural children in the U.S. because of the limited information available and inadequacies in information *(Institute of Medicine, 2005).* According to Fos and Hutchison (2010), *"oral health has received little attention in rural health research."* Inadequacies and limited available research on rural child health status present challenges to policymakers trying to address perceived oral health problems and devise policy strategies *(Fos and Hutchison, 2010).* The literature cites periodic federal surveys and state screenings targeting specific population segments (e.g., kindergarteners, school-aged; third graders), *which are* good indicators of the oral health status of children *(Center for Disease Control, 2015).* However, there is little aggregate data on the oral health status of rural children. Despite this gap in available health data on rural child health status, research did show evidence of disparities in access to dental care when compared to urban children. The literature pointed to evidence that: (1) rural children are more likely than urban children to report unmet dental needs; (2) urban children are more likely than rural children to have visited the dentist in the past year, and more likely to be regular users of dental care; and (3) children living in rural areas are more likely to be uninsured for dental care than urban children *(Martin, 2008).*

The prevalence of poverty in rural areas is a major factor in oral health disparities, which have been linked to the poor oral health status of rural children *(Gilchrist et al, 2015; Sheiham, 2005).* Although steadily declining, child poverty is a societal problem that negatively affects rural child health status *(Department of Agriculture (2017).* Poverty can limit a person's ability to access much needed oral health care services, which is due to the lack of resources to pay for care *(DeVoe et al, 2009).* Rural children living in poverty or low-income families are less likely to receive preventive health care than their counterparts *(Hartley, 2004).* In 2015, approximately 24.7 percent of children in Georgia lived in poverty *(Annie E. Casey Foundation, 2015).* Other disparities that adversely

impacted the oral health status of rural children included: *(Rural Health Information Hub, 2017)*

- cost of dental care;
- low-income;
- lack of dental insurance or uninsured;
- limited transportation services or lack of transportation;
- lack of providers accepting Medicaid and self-pay patients;
- lack of fluoridated community water supply; and
- lack of education or awareness about the importance of oral health.

Rural children continue to face risks to their oral health status often influenced by external factors. Program planners and policymakers may be required to use alternative strategies, such as telehealth technology, to improve access to care and oral health status of children in rural America.

ACCESS CHALLENGES IN RURAL AREAS

There are many benefits to living in rural areas (e.g., lower stress, sense of community, less traffic), the exception is when it comes to needing access to health care services. Geographical uneven distribution of dental providers has contributed to the lack of access to care *(Kaiser Family Foundation, 2016).* The Department of Health and Human Services (HHS) and numerous other agencies, which include HRSA, have pursued various efforts to develop resources and strategies to expand and improve access to oral health care for vulnerable populations. The lack of access to basic oral health care services has influenced persistent oral health disparities among underserved populations in the U.S. *(Institute of Medicine, 2011).* Children living in rural and remote communities are particularly vulnerable to access problems. According to the American Dental Association, access challenges have contributed to continual oral health disparities problems in rural areas (2013). Rural residents, who require access to oral health care services, are often hindered by multiple factors including social, cultural, economic, structural, and geographical location. Programs that provide access to preventive dental care early in children's lives can be beneficial to their health *(Glassman, Helgesonof et al, 2012).*

Geographical Location

The common thread throughout the literature is the impact of geographical location on health resulting in increasing oral health disparities among rural population *(Dye et al, 2012).* Approximately, 1 in 5 U.S. children lives in a rural area in the U.S. *(O'Hare, 2009).* Living in a rural or remote community can increase a child's risk of experiencing oral health disparities. Barriers to access related to geographical location, contribute to significant health problems and delays preventive and timely care *(National Rural Health Alliance, 2009).* Also, rural areas have fewer dental health providers resulting in residents having to travel farther to see the nearest provider in order to obtain dental care *(Health Resources and Services Administration, 2017).* Difficulties of access to care due to geographical location can impair health outcomes by increasing patients' physical and emotional stress, which reduces the likelihood of follow-up care *(Institute of Medicine, 2011).* There is a significant amount of literature that shows geographical location, as an access challenge in rural areas, can be eliminated through the use of telehealth networks to expand access to dental care *(Martin et al, 2012).* To improve access and reduce anxiety among rural residents, dental care providers could take advantage of the latest technology tools available (telehealth technology, teledentistry) to deliver quality dental care in rural settings *(Institutes of Medicine, 2005).*

Dental Provider Shortages

Research shows that there remains an unequal distribution of dental providers between urban and rural areas in the U.S. *(Estai et al, 2016).* A large number of DHPSAs are located in rural areas making workforce shortages an ongoing public health problem *(Health Resources and Services Administration, 2017).* In 2016, the total number of dental care HPSA designation was 5,493, which included a population of approximately 51 million people *(Kaiser Family Foundation, 2016).* As noted in the report, Georgia was ranked 5th among the states, District of Columbia, and the U.S. territories with the highest number of designations (189). HRSA expects dental shortages are likely to increase in the U.S. over the next 10 years in rural areas *(Koppelman, 2015).* Nationally, between 2008-2010 only 11 percent of dentists, 16 percent of dental hygienists, and 15 percent of dental assistants of the

total providers during this period practiced in rural areas as shown in **Table 3** *(Health Resources and Services Administration, 2014b).*

Access challenges in rural areas extend beyond geographical location and dental provider shortages. However, these two barriers significantly influence efforts to attract new and current dental providers to practice in rural areas compared to urban areas. Therefore, achieving the same goal, reducing oral disparities among rural children, will require using innovative practices to expand access when limited resources exist.

Table 3 Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas Health, 2008-2010 by Dental Occupation

OCCUPATION*	Providers in Rural Area	Total Providers	Providers per 10K, Rural Areas	Providers per 10K, Urban Areas
Dentists	18,673	168,299	3.6	5.9
Dental Hygienists	23,680	151,933	4.5	5.0
Dental Assistants	42,753	283,593	8.2	9.5

(*Based on supply and distribution of practitioners in 32 health occupations across urban and rural areas)

Source: HRSA: National Center for Health Workforce Analysis, 2014

(See **Appendix 1** for complete table on the Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas)

According to Rural Health Information Hub, rural dental practices are impacted by: (1) current health care system which is designed around face-to-face contact (providers may have to travel long distances to provide care); (2) the lack of adoption of telehealth in many rural areas; (3) fewer opportunities for career advancement; and (4) understaffing that creates increased workloads, longer shifts and less flexibility in scheduling *(Rural Health Information Hub, 2017)*. The literature suggests that addressing the challenges to access in rural areas will require attracting dental providers. This may be accomplished by using a variety of oral health care providers, enhancing financial incentives for recruitment and retention and providing oral health care services outside of the

physical facilities using alternative approaches to delivery *(Institute of Medicine of the National Academies, 2011).*

TELEMEDICINE AND TELEHEALTH

Health care and dental care remain among the few services that require face-to-face interaction to obtain access *(Kevdar, 2015)*. According to the American Telemedicine Association, more than 15 million Americans have received some form of remote medical care in 2015 (Beck, 2016). However, the practice of dentistry has been slow to adopt telehealth technology in the practice of dentistry *(Estai et al, 2016; Beck, 2016)*. Telemedicine and telehealth technologies are seen as potential solutions to addressing healthcare delivery access problems of vulnerable and underserved populations *(Kevdar, 2015).* Both technologies have been effectively used in medicine to bring needed services within reach of rural populations with provider shortages. Numerous studies support telehealth technology as an alternative strategy outside of traditional avenues to close the rural-urban access to care gap *(Rabinowitz, 2016).*

TELEDENTISTRY AND ACCESS

According to the Oral Health Workforce Research Center (OHWRC), growing concerns among some organizations and providers about the lack of access to dental services in rural areas have welcomed the idea of innovative strategies and tools to remove access barriers (2016). Teledentistry is mentioned throughout the literature as a key factor for improving access to care in rural underserved populations and remote areas *(Daniel and Kumar, 2014)*. Teledentistry offers an efficient way of screening high-risk pre-school children for signs of early childhood dental caries *(Kopycka-Kedzierawski et al, 2017).*

Teledentistry networks have been instrumental in improving access to oral health care services in rural and isolated communities where unmet dental needs exist *(Glassman, Harrington et al, 2012)*. An example of an evidenced-based practice includes the Virtual Dental Home (VDH), a federally funded pilot project developed at the University of the Pacific, Arthur Dugoni School of Dentistry, as a community-based oral health delivery system in 2010. The project includes 11 "virtual dental homes" throughout California that assist underserved populations *(e.g., school-children, elderly and disabled)* lacking access to routine dental care. Between 2010-2015, there were 7,967 encounters

– more than 60 percent needed referrals. The program reports that 86 percent of the parents surveyed were very satisfied with the overall dental care their children received through the project *(University of the Pacific, 2016).* New approaches, such as VDH, are encouraged to improve access to dental care for children living in rural areas facing dental provider shortages *(Fricton and Chen, 2009).* Such approaches entail delivering oral health services in non-traditional settings, which include schools, rural clinics within the communities or local health departments.

Findings in the literature support evidence that rural children suffer disproportionately from the lack of access to care because of their geographical location. Telehealth technologies have proven to be effective in the practice of dentistry using teledentistry. Efforts to properly assess and address challenges concerning the oral health status of rural children necessitate health care and public health systems developing innovative practices. These strategies include evidence-based telehealth network technology to eliminate access barriers influenced by geographical location, dental provider shortages, and other factors specific to the community. The effects of oral health disparities, linked to barriers to access, strongly influence the overall health of rural children, which is well documented in the literature.

Improving rural children's health will require increased research and innovative practices to address lack of access where significant dental provider shortages exist. Telehealth teledentistry networks present opportunities not only to improve access but to assess rural children’s oral health status and provide referrals to dental homes for continuous dental care *(Oral Health Workforce Research Center, 2016).* However, to adequately assess oral health, the availability of dental care providers, implementation of oral health programs or networks will be important in gathering information to address ways to improve rural children oral health status.

CHAPTER 3 METHODOLOGY OF REVIEW PROCESS

DESCRIPTION OF GRANT ANNOUNCEMENT

This grant announcement is from the Health Resources and Services Administration (HRSA) Funding Opportunity Announcement (FOA), Number: HRSA-16-012, Telehealth Network Grant Program (TNGP), under the division of the Federal Office of Rural Health, Office for the Advancement of Telehealth. The purpose of the TNGP is to show how telehealth networks are utilized to: 1) expand access to, coordinate, and improve the quality of health care services, 2) improve and expand the training of health care providers, and/or 3) expand and improve the quality of health information available to health care providers, and patients and their families, for decision-making.

HRSA seeks an innovative proposal that meets new and emerging needs in a changing health care delivery system that focus on value and improved health care outcomes. Eligible applicants may include rural or urban nonprofit entities, faith-based, community-based, and tribal organizations. Specifically, HRSA seeks telehealth services that can be delivered through school-based health centers/clinics (SBHC), particularly those serving high-poverty populations. TNGP proposals delivered through SBHCs are strongly encouraged to provide telehealth services for rural children that focuses on clinical areas that include: 1) asthma, 2) obesity reduction and prevention, 3) behavioral health, 4) diabetes and 5) oral health – applicants must identify a clinical focus area(s). Also, networks delivered through SBHCs must demonstrate how it will expand access to, coordinate and improve the quality of health care services through SBHCs, especially networks that plan to serve the broader community beyond normal school hours.

Applicants may be located in either rural or urban area, but all grant activities must serve rural communities. Proposals submitted by applicants must provide an explanation on how they intend to base their project on established clinical evidence, in accordance with the Improving Rural Health Care Initiative. The primary objective of the TNGP will be to demonstrate how the telehealth program or network will improve access to quality health care services in rural, frontier,

and underserved communities for the target population. Total grant funding available is approximately $6 million to fund up to 20 recipients. The ceiling amount is up to $300,000 per year for each applicant – multiple applications from an organization are not allowed. Projects are funded for a period of four years, and funding beyond the first year will be dependent upon:

1. the availability of appropriated funds for the "Telehealth Network Grant Program" in subsequent fiscal years,
2. satisfactory performance by awardees,
3. decision that continued funding is in the best interest of the federal government, and
4. post-award compliance with data collection as specified by the Office for the Advancement of Telehealth (OAT).

To submit a grant proposal for this FOA, HRSA requires applicants to apply electronically through Grants.gov. Also, applicants must download the SF-424 Application Package associated with this FOA and follow the instructions located at Grants.gov. Upon award, recipients will be required to participate in a broad program evaluation with common measures to assess how the use of this technology affected health care outcomes, and report on specific performance measures, which include:

1. types of telehealth network partner settings;
2. the number of encounters by specialty/service, by patient care setting (network facility), and by type of telemedicine encounter;
3. third party and grant reimbursement received for the encounters;
4. new services available in rural areas due to the grant;
5. patient and practitioner travel miles saved by each network facility; and
6. the number of practitioner referrals at each network facility.

PROPOSAL REVIEW CRITERIA

The grant proposal review process consists of health professions subject experts who serve as peer reviewers and evaluate grant applications based on the HRSA FOA published criteria.

Reviewers are chosen based on their knowledge, education, experience and any criteria included in FOA. The seven criterions, which are specific to this proposal, that reviewers will use to evaluate applications include: 1) Need, 2) Response, 3) Evaluative Measures, 4) Impact, 5) Resources/ Capabilities, 6) Support Requested, and 7) Assessing Technology and Integrating Administrative and Clinical Systems. A brief description of HRSA's criteria used to review and rank submitted TNGP proposals. (**Table 4**).

Table 4 Review Criteria for TNGP Proposal Evaluation Process

Criterion	**Review Criteria**
Need	Clearly identifies the rural areas and specific SBHCs, if applicable, to be served by project; Describes target population and unmet health needs, socio-economic challenges of service area (e.g., burden of poverty).
Response	Describes proposed goals and objectives and benefits that include: *Goal and Objectives* –consistent with the rationale for the proposed project; *Benefits* – quantifiable benefits of clinical services being delivered by telehealth network.
Evaluative Measures	Addresses the plan for completing a program assessment and effectiveness of proposed methods to monitor and assess results *(e.g., obstacles and solutions to implementing the program).*
Impact	Clearly identifies how health status of target population will be improved as a result of program activities based on: *Sustainability* – describes activities to sustain telehealth network once federal funding ends; *Project Impact and Information Dissemination* –demonstrates the strength of approach and success in serving the target population, and provide reports on specific performance measures.
Resources/ Capabilities	Project describes qualification of project personnel, capabilities of telehealth network, availability of facilities and personnel to meet project's needs and requirements.
Support Requested	Project describes budget *(e.g., goal(s), objectives),* proposed activities, and cost projections.
Assessing Technology and Integrating Administrative and Clinical Systems	Project describes how telehealth network and network members/partners demonstrate knowledge of technical requirements.

Source: Human Resources and Services Administration (*FOA HRSA-16-102*)

(See **Appendix 2** for a full copy of the HRSA FOA)

REVIEW OF FUNDING AGENCIES

The Health Resources and Services Administration (HRSA), an agency within the U.S. Department of Health and Human Services, was created when Health Resources Administration was merged with Health Services Administration in 1982. HRSA agency is the primary federal agency for improving health care to people who are isolated geographically and disadvantaged both medically and economically. HRSA's mission is to improve health and achieve health equity through access to quality services, a skilled health workforce and innovative programs, which is done through grants, cooperative agreements, state contracts, local governments, community and faith-based organizations, and academic institutions. Since merging, HRSA has continued the work of previous agencies to improve the health of underserved populations through the funding of over 3,000 grantees and 90-plus programs that provide millions of Americans with quality, affordable health care and other services *(Health Resources and Services Administration, 2017)*. Recipients who most benefit from projects funded by HRSA are populations that would otherwise be unable to access high quality health such as people living with HIV/AIDS, pregnant women, mothers and their families, especially poor children. In serving the vulnerable, HRSA seeks to reduce health disparities that research has found to be significant among this population.

Research shows that certain groups and underserved populations, particularly rural areas, are most affected by provider shortages *(Guay, 2004)*. HRSA provides training to health professionals, allocates providers to areas where needed, and supports improvements in delivering health care in these areas. To accomplish its mission to vulnerable people and populations, HRSA's has established goals that include: a) improving access to quality health care and services, b) strengthening the health workforce, c) building communities, d) improving health equity, and e) strengthening HRSA program management and operations. **Table 5** provides an overview of HRSA's goals and objectives.

Table 5 HRSA's Goals and Objectives

GOALS	**Objectives**
1. Improve Access to Quality Health Care and Services (QHCS)	1. Increase capacity and strength of safety nets; 2. Improve quality and efficacy of safety nets; and 3. Increase enrollment in and use of health insurance
2. Strengthen the Health Workforce	1. Advance competencies of healthcare and public health workforces; 2. Increase diversity and distribution of workforces and providers among disadvantaged populations in underserved areas; and 3. Enhance workforce assessment focus and policy analysis.
3. Build Health Communities	1. Improve population health through partnerships and collaborations with stakeholders; 2. Strengthen focus on health promotion and prevention; 3. Increase understanding in health care and public health of what is effective in meeting community needs.
4. Improve Health Equity	1. Reduce health disparities in access and quality of care, and improve health outcomes in communities and across populations; 2. Advance evidence-based, evidence-informed, and innovative practices to reduce health disparities; and 3. Inform program improvement efforts by assessing the effectiveness of programs in addressing health disparities.
5. Strengthen HRSA Program Management and Operations	1. Improve efficiency and effectiveness of operations; 2. Strengthen workforce to support a performance-driven organization; 3. Enhance HRSA's program oversight and integrity; and 4. Promote customer-centered culture within HRSA.

Source: Human Resources and Services Administration (*FOA HRSA-16-102*)

(See **Appendix 2** for a full description of the HRSA Goals and Objectives in HRSA FOA)

Along with HRSA, numerous organizations (public and private) address oral health disparities among underserved populations, especially children, by funding of projects, programs, and research. These organizations include:

American Dental Association Foundation

The ADA Foundation (ADA Foundation) provides funding for dental communities, along with working to improve oral health by supporting access to care, research, and education programs. ADA Foundation's mission is expressed in the acronym C.A.R.E., which stands for 1) **C**haritable assistance, 2) **A**ccess to care, 3) **R**esearch, and 4) **E**ducation. Through its Give Kids A Smile (GKAS) Continuity of Care Grant Program, the ADA Foundation provides funding to eligible organizations to address the lack of access to dental care among children. Grants offer financial assistance to GKAS programs that have sign-up through the ADA Foundation GKAS Sign-up System *(http://adafoundation.org/gkas)*. The program's goal is to provide continuity of oral health care to children being served after the initial GKAS event. Grants are awarded up to $50,000 annually. To become eligible: 1) GKAS program applicants sign-up to participate through the ADA Foundation's GKAS sign-up system at adafoundation.org/gkas; 2) community services must target children from underserved families whose treatment needs were not completed during a previous GKAS event; and 3) applicants must be a U.S.-based nonprofit organization that is exempted from taxation under Section 501 (c) (3) of the Internal Revenue Code, if charitable activities are within the U.S.

The Foundation of the American Academy of Pediatric Dentistry

The American Academy of Pediatric Dentistry *(*AAPD), is a non-profit professional membership association, founded in 1947, that represents pediatric dentistry, The AAPD is the authority on children's oral health that:

1. promotes evidence-based policies and clinical guidelines,
2. educates and informs policymakers, parents and guardians, and other health care professionals; fosters research, and
3. provides continuing professional education for pediatric dentists and general dentists who provide treatment for children.

Healthy Smiles, Healthy Children (HSHC) – HSHC is the charitable division of the AAPD, a 501(c)(3) organization established in 1987, that provides dental homes for children

nationwide. HSHC awards single-year grants of up to $20,000. The organization's Access to Care Grants program *has funded* community-based initiatives throughout the U.S., provided dental care services and served as dental homes to underserved/limited access children. The organization has awarded more than $4 million in grants and commitments to 81 organizations in 29 states and the District of Columbia supporting access to care initiatives that have more than 300,000 children with finding dental homes since 2010 *(American Academy of Pediatric Dentistry, 2017).*

DentaQuest Foundation

The DentaQuest Foundation (DQF), established in 2000, is the leading U.S. philanthropy focused solely on oral health, which focuses on prevention, access to oral health care and partnerships with funders, providers, policymakers and community leaders. The DQF's mission is to improve the oral health of all, which is accomplished through investments efforts in four systems: policy, funding, care and community, and collaborations with key partners and stakeholders in communities throughout the United States. The DQF has awarded over $30 million in grants to organizations engaged in improving oral health. To become eligible to apply, organizations must have 501(c)(3) nonprofit status (grants are not made directly to individuals). A summary of grants and programs include:

Oral Health 2020 **–** A multi-year effort to engage grantees and partners in strengthening and unifying oral health networks aligned to improve oral health by building upon current initiative strategies and expanding impact. Oral Health 2020 investments are structured around the realization of a vision for improved oral health:

The Community Response Fund – provides funding to address acute, short-term care delivery problems that community-based care providers may face improving oral health for underserved populations. Funding supports small, one-time grants that address access to oral health care. The focus is to support programs, activities and events that:

1. respond to an urgent issue that impacts access to clinical care,

2. provide short term access to needed care for the underserved, and
3. sustain organizations through short term challenges.

Executive Director's Fund – These grants are generally smaller awards that support convenings, events and activities that promote oral health.

National Institute of Dental and Craniofacial Research

The National Institute of Dental and Craniofacial Research (NIDCR), an agency of the National Institutes of Health (NIH), is the leading supporter of research on dental, oral, and craniofacial health. NIDCR provides grants funding for research focused at eliminating inequities in access to care and improving the oral health of children. More than $7 million is awarded in first-year funding to support the Multidisciplinary and Collaborative Research Consortium to Reduce Oral Health Disparities in Children. NIDCR created the Centers for Research to Reduce Disparities in Oral Health and began focusing on reducing oral health disparities. NIDCR's community-based investigations have exposed the complex social and behavioral determinants of oral health disparities and inequities.

Maternal and Child Health Bureau

The Maternal and Child Health Bureau (MCHB) funds proposals that address access to oral care through the School-Based Comprehensive Oral Health Services (SBCOHS) Grant program. MCHB's mission is to expand existing SBHC delivery systems with culturally competent, high-quality oral health care, and effective education programs to strengthen existing SBHC capacity *(Health Resources and Services Administration, 2017).* MCHB funds programs that demonstrate successful integration of comprehensive oral health care services into primary care into existing SBHCs. Applicants must assure the delivery of quality oral education and preventive and restorative services to vulnerable children and youth enrolled in Medicaid and the Children's Health Insurance Program (CHIP). SBCOHS applicants are required to increase access to oral health care services for underserved populations and address children and adolescents' oral health needs. Annual funding available is up to $2.4 million (maximum annual funding does not exceed $200,000 per year).

Approximately12 grants are awarded annually for a four-year project period. Continuing support is subject to availability of funds, satisfactory grantee performance, and a determination that continued funding is in the best interest of the government.

GRANT REVIEW PROCESS

The grant proposal will be reviewed and scored by a review panel. The panel will be comprised of individuals who are deemed qualified by reason of training and/or experience, have no personal or financial interest in the selection of any particular applicant, and will judge the merits of the proposals received in accordance with the evaluation factors stated in this request for grant proposals. The review committee was provided a copy of the HRSA FOA ***(Appendix 2)***, the grant proposal (Chapter 5), and the grant reviewer form ***(Appendix 3)***, which was sent by electronic mail. The sole objective of the review panel will be to accurately and effectively meet the goals of the grant program.

GRANT PROPOSAL REVIEWERS

Kathleen R. Miner, PhD, MPH, MCHES, *Professor (tenured), Emory Rollins School of Public Health*

Dr. Miner is Associate Dean for Applied Public Health and tenured Professor in the Department of Behavioral Sciences and Health Education at Emory University Rollins School of Public Health. Dr. Miner has been a leader, manager and educator in the public health field for over 35 years, and she has been the principal investigator on training grants in excess of $48 million. Dr. Miner is an active member of both local and national professional associations in the field of public health, which include GASOPHE, National SOPHE, GPHA, and APHA. She took the lead on funding and being one of the guest editors on a special issue of Health Promotion Practice dedicated to the work of the Public Health Training Centers (PHTCs). Dr. Miner has also been instrumental in the development of numerous professional competencies sets and is a recognized expert in competency-based adult education development and delivery.

Trevor Niels Thomas, MPH, *District Epidemiologist and Infectious Disease Coordinator, Office of Infectious Disease and Office of Emergency Preparedness, Georgia Department of Public Health*

Mr. Thomas is an epidemiologist with the Southeast Health District, part of the Georgia Department of Public Health. In 2009, he received his MPH at Idaho State University and a Bachelor of Health Promotion from Weber State University in 2007. Mr. serves as the District Epidemiologist and Infectious Disease Coordinator where he has led the infectious disease prevention programs since 2012. Prior to his educational pursuits, he lived in Peru for two years during which time he learned Spanish and gained greater insights and experience in regards to health inequities and interacting with cultures, traditions, beliefs, and values, which provides a unique mix of academic, work, and volunteer experience that have helped to develop skills in areas such as program planning and evaluation, public health emergency preparedness/disaster response, writing, research, and health promotion and education. Also, a greater understanding of various populations and their diverse needs and how to deal with unique challenges.

Andrea Pendergrass, MAT*, Science Teacher and Educator, Atlanta Public Schools System*

Ms. Pendergrass is a science teacher at South Atlanta School of Health and Medical Science. She received her Master of Arts in Teaching degree from Georgia State University in 2012. She has been a dedicated teacher for more than years in the Atlanta Public School System. In addition to being a science teacher, she holds the position of Educator where she serves as the Science Department Chair, Grade Level Team Lead, oversees Science Curriculum Development. She is currently the leader of a grant team that is working on a STEM Grant for her school.

Daniel C. Rutz, MPH, *Instructor, Emory Rollins School of Public Health*

Mr. Rutz is an instructor at Emory University where he teaches Integrated Communication Strategies in the Executive MPH Program. In 2002, he received his MPH at Emory University Rollins School of Public. His areas of interest include behavior and health, global health, health communication, HIV/AIDS prevention, health promotion and injury and violence prevention. He has served as the Associate Director of Communication Science at the National Center for Infectious Diseases (NCID) at the Centers for Disease Control and Prevention (CDC). He also had a career as an on-air Senior Medical Correspondent for CNN in Atlanta, Georgia.

***Zainab Wurie Harvey, JD**, Assistant Director, Faculty Affairs Administration, Emory School of Medicine*

Mrs. Harvey currently serves as the Assistant Director for Faculty Affairs Administration at the Emory School of Medicine. In 2013, she received her JD from the Emory School of Law. Mrs. Harvey's role includes representing the School in contract negotiations with outside entities and making decisions based on the interpretation and application of contract language and institutional policies. In this capacity, she drafts and reviews a broad range of institutional agreements many of which are highly complex and of critical importance to the mission of the School. Mrs. Harvey ensures agreements comply with various laws and works closely with various University and Healthcare administrators in resolving contract issues.

PROTECTION OF HUMAN SUBJECTS

Telehealth networks can be undermined if privacy and security risks are not adequately addressed and maintained. Protecting the rights, privacy, and welfare of participants in human subjects research is a requirement for all studies. Protection of human subjects apply to studies conducted internally by federal staff and to external studies conducted by grantees and contractors. The Department of Health and Human Services (HHS), Office for Human Research Protections (ORHP), under the Federalwide Assurance (FWA) For the Protection of Human Subjects *(Common Rule)*, require that all applicants protect human subjects participating in research programs conducted or supported by HRSA *(Health and Human Services, 2017a).*

According to ORHP regulations, all human subjects research activities apply whenever an organization is involved in human subjects research conducted or supported by any federal department or agency, whether or not the research is subject to the Common Rule *(Health and Human Services, 2017a).* However, a study may be exempt from the requirements of the Common Rule, if a U.S. federal department or agency conducting or supporting the research determines that the research shall be conducted under a separate assurance *(Health and Human Services, 2017a).*

The protection of human subjects using telecommunication technology presents a new set of challenges in managing privacy, confidentiality and data security risks of electronic systems with the

increasing number of people who have potential access to patient data. However, protecting human subjects in telehealth remains the same as in medicine.

Patient Protection and Telehealth

Telehealth network activities involve obtaining access to patient records or information, which may jeopardize patient privacy. According to the Health Insurance Portability and Accountability Act (HIPAA) and Fair Information Practice Principles (FIPPs), telehealth networks must comply with the same regulations under the Common Rule in protecting human subjects research and apply them to protecting patient privacy, confidentiality and data security

HIPAA Protections

In telehealth, provider and all those who have access to patient date have the same duty to safeguard a patient's medical records and keep their treatments confidential. HIPAA requires that identifiable health information be encrypted so that only those authorized to read it can do so. Providers are required to comply with HIPAA requirements whether they are delivering services through telemedicine/telehealth or in-person. The same precaution and care should be applied to storage of electronic files, images, audio/video tapes as to paper documents. Additionally, telehealth networks should ensure that the environment where telehealth communication takes place (originating and distant sites), is secure and patient information is not accidentally exposed. Most importantly, patient's personal health information should not be disclosed or accessed without patient's consent. HIPAA violations range from ranging from $100 to $1.5 million (Health and Human Services, 2017b). HIPAA compliance also applies to the provider's business associates. Telehealth Resource Centers' HIPAA and Telehealth Compliance Guide.

FIPPs Protections

With the increase in the use of computers in the 1970's, resulted in organizations collecting personal information, few rules existed to protect personal information being captured electronically by organizations. In 1974, the Privacy Act established FIPPs, a code of fair information practices that governs the collection, maintenance, use, and dissemination of information about individuals that is

maintained in systems of records by federal agencies *(Health and Human Services, 2017a).* FIPPs, considered the gold standard for protecting personal information considered the standard for protecting personal information, require that data holders establish and abide by contextually appropriate limits on data access, use, and disclosure in accordance. FIPPs provide the terms and conditions by which institutions can collect, use, and retain personal information.

Transmitting patient data using telecommunication technology carries potential privacy, confidentiality and security risks, which include telehealth consultation with technical personnel, independent of the medical team, who may be exposed to patient data. **Table 6** describes approaches to controlling potential risks in telehealth communication

Table 6 Patient Privacy Risks and Controls in Telehealth

Potential Risks	**Description**	**Controls**
Privacy	Lack of controls or limits on the collection, use and disclosure of sensitive personal information.	Telehealth networks should have controls in place to that comply with FIPPs.
Confidentiality	Increased number of people with access to a patient's records.	Enter into network associate agreements with technical personnel obligating them to maintain the same confidentiality required of the provider under HIPAA.
Security	Involve appropriate security controls for telehealth systems involves specifying what kinds of security threats they should protect against.	Data encryption of patient health information. HIPAA requires that entities implement a mechanism to encrypt Protected Health Information (PHI) whenever deemed appropriate.

Sources: Department of Health and Human Services, 2017a; Hall and McGraw, 2014

To minimize potential risks and to comply with the Common Rule, HIPAA, and FIPPs, telehealth networks will need to ensure strong privacy and security protections for the telehealth network and implemented and maintained. In addition, telehealth networks need establish agreements with network associates and technical personnel that require them to comply with the same privacy and confidentiality requirements as the network.

(See **Appendix 4** for additional information on the HIPAA and Telehealth Compliance Guide)

CHAPTER 4 GRANT REVIEWERS COMMENTS

This chapter outlines the comments made by the five thesis grant proposal reviewers on different aspects of the grant proposal. Those providing valuable and insightful comments to improve my grant proposal include Kathy Miner, PhD, MPH, Trevor Thomas, MPH, Andrea Pendergrass, MAT, Zainab Wurie Harvey, JD, and Daniel Rutz, MPH. Their comments are as follows:

REVIEWER 1 COMMENTS

Comment 1

All looks good. If there are major changes/additions, please let me read them. Well done.

Response to comment 1

Thank you for your guidance. Changes that we discussed throughout this process have been incorporated within the document. As reviewers send in their comments, major changes/additions will be forwarded to you and field advisor for review.

REVIEWER 2 COMMENTS

Comment 1

Statement needs source documentation: "Telehealth networks have proven to be effective in improving health outcomes through the delivery of medical, health and education services through the use of telecommunication technology."

Response to comment 1

Thank you for pointing this out. The Introduction was revised and this sentence is no longer in the document.

Comment 2

Numerous citations referring to County Health Rankings are not listed under the References section.

Response to comment 2

Thank you for catching this. The references have been added.

Comment 3

The description of the target population is lacking justification for how you arrived at those schools. Please address justification for site selection based on race/ethnicity and geographical location.

Response to comment 3

I rewrote this section to clarify the justification for selecting Coffee County and the target population. The included text was also tied to the justification to the grant requirements - applicants are encouraged to provide telehealth services for rural children, with the purpose of addressing health disparity indicators (e.g., asthma, obesity, oral health, etc.) that impact rural child health status.

Comment 4

How services will be billed is not clear in the "program activities" section or in other portions of the proposal. How the grant will pay for that is not clear. How dental homes are selected is not clear nor how they can receive remuneration for provided services.

Response to comment 4

A Billing and Reimbursement subheading was added under Program Overview that describes a brief description of how services will be billed. How dental homes will be selected has been included in the Program Overview. This program is modeled after other established teledentistry programs in the SEHD, so the pilot program will depend heavily on previously established partnership and collaborations in designing its program.

Comment 5

Related to the issue of the pilot program sending "agreed upon" information to the new dental home is a question/issue that will need to be addressed. As the pilot program is not the healthcare provider, what patient data is given to the pilot? The patient chart is likely to be maintained in the SBHC clinic as well as at the pediatric dental office in Augusta and the new dental home. How and how much patient information the pilot actually receives is a question and where that information is stored as well.

Response to comment 5

Thank you for explaining this to me. I have added a sentence that the responsibilities of will maintain patient chart and have access patient information will be defined in the MOUs with network partners during the planning stage.

Comment 6

One of the main operational barriers that may affect the actual viability of the program is not just the low ratio of patients to dental providers (3,290:1) for Coffee County, it is also the misconception about the number of Medicaid/SCHIP providers that are available. (You have a statement that says "Increase enrollment in and utilization of health insurance through Medicaid, CHIP, and the Health Insurance Marketplace." as an objective of Goal 1 (in table 3.2) but in many cases, dental practices maintain a certain number of Medicaid/SCHIP patients allowed in the practice (often as few as five or ten patients). This can dramatically affect program outcomes unless a different payer source is available long-term.

Response to comment 6

I apologize for not explaining this thesis structure better. The goal you are referring to is one of HRSA's Goals and Objectives, which are located in Chapter 3 Methodology of the Review Process. The goals and objectives of the Telehealth Network Program Grant are included in Table 3.1. For a thesis grant proposal, students are required to provide an overview of the granting agency (HRSA) and the guidelines for the selected grant (TNPG) in this chapter for the Thesis Committee review, which they have summarized in this chapter. This chapter also includes the guidelines/criteria for the Program Narrative, which the student is only required to complete. This is why this information is not included in my proposal.

Comment 7

I don't recall you addressing the related challenge to the above issue in comment 6 related to attracting dental providers to work in rural areas. The combination of lack of dental insurance by most families, low per capita income (and thus the inability of families to pay for dental care), and

low Medicaid reimbursement rates for those clients who are Medicaid eligible, means that dental practices in rural South Georgia are not as financially viable as those in urban areas. Which is where more residents either have dental insurance or can afford to pay out of pocket for dental care. This fact is illustrated by the Georgia Health Policy Center that demonstrated that children from metro Atlanta are more likely to have good oral health those children from rural areas.

Response to comment 7

This is a good question. During my research to dental care access, I found that there were many challenges to access, which includes all of the things you mentioned above. However, in my research on challenges to dental care access in rural areas, geographical location and dental provider shortages were often mentioned in the research; therefore, this is why I narrowed my focus on these two barriers to access. However, a few of the other challenges you mentioned were acknowledged in Chapter1 under subtopic "Rural Child Oral Health Status".

Comment 8

"Among low-income children in Georgia, about half of those aged six to 19 years have untreated tooth decay."

This is a statement from our own submission. There is no source for some reason so I don't know where it came from but that is significant.

Response to comment 8

Thanks for this additional information. The wording has been changed, which I have included in the Introduction in Chapter 1 and referenced it both in the document and under References.

Comment 9

Target population section would look better in a table.

Response to comment 9

Thank you for the recommendation. The committee chair also suggested putting the target population information in a table. I have placed it in a table, and it does look better.

Comment 10

"The Coffee Telehealth Program, a comprehensive Adult and Pediatric Primary Care site, located in 11 schools and the Coffee Regional Hospital (CRH) School-Based Health Clinic, a midlevel provider, is located at Coffee Middle School." 12 vs 11 schools? This is a bit confusing. There are telehealth sites from both networks at the same schools? You may need to address this duplication of effort and or services.

Response to Comment 10

Thank you for your observation. Yes, that was a bit confusing to me as well. I rewrote this section to make it clearer.

"Coffee Telehealth SBHCs are located in all 12 schools in Coffee County and is made up of two telehealth networks – Coffee Telehealth Program and Coffee Regional Hospital (CRH) School-Based Health Clinic. The Coffee Telehealth Program, which provides comprehensive adult and pediatric primary care services, operate sites in 11 schools. The CRH SBHC, which is a midlevel provider, only operate at Coffee Middle School, but provides services to staff and students from all 12 schools." I believe this reads much clearer than the previous version.

REVIEWER 3 COMMENTS

Comment 1

I made a few minor suggestions on the paper, but overall, I think that everything was clear, concise, and easy to understand.

Response to comment 1

Thanks for catching those edits. I have since made the changes.

Comment 2

The one general piece of feedback is in the self-assessment section of the paper, which is to add some more specific quantitative data to examine the progress of the program *(i.e. surveys given to the various stakeholders and participants).* Other than that, everything looked good to me.

Response to comment 2

Thank you for this great suggestion. Surveys will be developed to include stakeholders and other participants, including an age-appropriate one for students.

REVIEWER 4 COMMENTS

Comment 1

Before final submission, I'd recommend your replacing the generic template language, *e.g., "Final Version of Grant Proposal"* with more specific wording. Note: If university protocol calls for retaining the format exactly as it appears, disregard this comment.

Response to comment 1

Thank you. And yes, the university protocol calls for retaining the format exactly as it appears. This is mentioned in the guidelines for the wording of Chapter 5.

Comment 2

Reviewer has edited the abstract to illustrate the importance of consistency in English composition. He recommends complete sentences, except in rare instances where bullet points allow for phrases or fragments. Wording and formatting should also be consistent throughout the document. Reviewer offered initial editing to clarify the deficiencies; it is up to the student to edit the remainder of the document, applying grammatically correct composition practices prior to final submission.

Response to comment 2

Thank you for your honest opinion. I realized that with your communications background I had selected the appropriate person to catch my writing flaws. Also, while recently rereading it, I had added in missing articles and words (a recent telephone….).

However, there were several grammatical errors and sentence fragments that I had not previously caught. So, thanks for pointing those out. I have read this document so many times, that I have enlisted a friend to look at this section as well because I'm sure my brain with skip over them again. Thanks again for the edits that you made. Regarding the formatting, I usually leave that as my last point of focus, after I've made all other edits and changes, as I generally print the final document to

review the format. I appreciate the time and effort you put into making sure that I have a well-written grant proposal.

Comment 3

The application includes a lot of redundancies; this may be consistent with grant application protocol but can be somewhat remedied through avoidance of verbatim phrasing.

Response to comment 3

Thank you for this comment. I believe that this practice is consistent with grants, as it is a different style of writing. Two of my reviewers have grant writing experience, and agree with my style, however, this was not previously noted. Nevertheless, thank you for pointing this out. I will take another glance through this document to see if anything needs to be rephrased. I did, however, remove a section that I agree was redundant – which was after under the Proposed program activities.

Comment 4

See embedded comments which point out specific areas for clarification and other improvements. Note that these examples are illustrative and not comprehensive. That is to say, the entire piece should be reviewed for additional refinement.

Response to comment 4

Thank you. This comment is very helpful for use within my document. I used them to greatly improve my proposal.

Comment 5

Tables under methodology include fragments; this is OK in that setting. In fact, the methodology section is stronger, overall, than the preceding sections.

Response to comment 5

Thank you. Yes, I agree and have seen examples where fragments were used.

Comment 6

The budget ($300,000) does not include a break-down, as would be required in an actual grant proposal submission. If this exercise does not require a break-down, disregard this comment; if it does, this step requires completion.

Response to comment 6

Another reviewer inquired about the same thing. No, including a break-down was not a requirement. However, I did a "proposed budget" and "budget narrative" that projected the grant year when the project expenses would occur, as a routine practice to follow the grant requirements.

Comment 7

Not sure what a "dental home" is. Is this correct terminology, and if so, is a definition required or can people in the field be expected to know what this means?

Response to comment 7

Yes, it is the correct terminology. It is a term is often used in dentistry to describe a continuous relationship between a dentist and a patient. However, you are correct to point out that not everyone outside of dentistry would know this terminology. Therefore, I have added it to the definition of terms list.

REVIEWER 5 COMMENTS

Comment 1

Teledentistry is a fantastic idea that seems to be needed in the communities in which service is proposed, fantastic job! Regarding any MOU that's proposed, be sure to clearly outline each party's responsibilities.

Response to comment 1

Thank you for your sage legal advice, as this program will rely heavily on multiple partnerships. Also, thank you for advicing me to clearly outline the responsibility of all those involved, especially as it relates to protecting patient privacy.

Comment 2:

Regarding any proposed MOU, you would want to ensure that all parties are insured for general and professional liability, and you should have those insurance requirements and specific monetary limits outlined in the documents. You would also want to have indemnification requirements, and a risk management official should help draft both the insurance and the indemnification provisions.

Response to comment 2

Great advice and important to know that theses clauses should be include on all MOUs and agreement to protect the children and the program.

Comment 3:

Your comments are appreciated and very forward-thinking in anticipating potential HIPAA issues and to have included HIPAA protections in the proposal—brilliant! The MOUs with school boards, dental providers, etc., should also have HIPAA confidentiality provisions.

Response to comment 3

Thank you for this comment. This is very good advice that will be adhered to because this is major requirement of the funding agency, especially when using telehealth technology to deliver services and/or accessing patient data virtually.

Comment 4

One of the most contingent issues that develop with MOUs is terminating the MOU. It's common to see a party seek termination, but the termination provision in the MOU does not favor that party, and the party may essentially be stuck in the agreement until its stated termination. In my professional practice, I aim to draft fair termination provisions. Of course, depending on the agreement, I may have an uneven provision that is more optimal for my side of the contract; or I may decide to accept a provision that is more optimal for the other side. It will indeed depend on the specific MOU, so one must be sure to pay close attention when drafting a good termination clause.

Response to comment 4

Thank you again for this great advice. There may be times when an agreement may need to be terminated, so this is really good advice.

CHAPTER 5 FINAL VERSION OF GRANT PROPOSAL

PROJECT ABSTRACT

PROJECT FACE PAGE

Project Title:	TeleSMILE Telehealth Network Program
Applicant Organization Name:	Guidepost Community Service Agency
Address:	1234 Caroline Street, NE, Atlanta, GA 30307
Project Director Name:	Karen Johnson, MPH
Contact Phone Numbers (Voice, Fax):	(404) 555-6777
Email Address:	kjohnson@gmail.com
Website Address:	coffee-ga@telesmile.org

Funding Preferences – The pilot program requests funding preferences for organization, services, coordination and network.

Service Area –The service area and target population in this grant application is: Coffee County, GA (population of 43,003, 67 percent rural, 603 square miles - 575sq. mi land area/28 sq. mi water). The county has been designated as a low-income/population group, full Health Professional Shortage Area (HPSA) in primary care, dental health and mental health, and a full Medically Underserved Area (MUA).

Needs, Objectives, and Projected Outcomes – Coffee County, GA has an unmet need for dental care services resulting in oral health disparities. The county faces barriers to access because of significant dental health provider shortages. The program intention is to expand dental services access through telehealth technology (teledentistry), thereby removing barriers to access, and providing referrals to dental homes to reduce oral health disparities among schoolchildren in Coffee County.

School-Based Health Centers (SBHC) – The proposed telehealth network project includes five rural SBHC originating sites in Coffee County, GA in these schools: Ambrose Elementary, Broxton-Mary Hayes Elementary, Coffee Middle, Nicholls Elementary, and Westside Elementary

Clinical Services to be Provided – The project employs teledentistry (via videoconferencing) to expand access to dental care services, provide referrals to dental homes, and broaden outreach activities.

Actual Patients/Persons Served – An estimated 2,543 students (90 percent of the student population) qualifies for free/reduced-price lunches at targeted SHBCs telehealth network sites during the project period (September 1, 2017- August 30, 2021).

Self-Assessment – The program's self-assessment includes: 1) monthly program staff meetings to monitor progress, identify barriers/challenges and develop solutions; 2) monthly review of program data, practices, procedures and outreach activities for the purpose of identifying areas for improvement; and 3) Quarterly meetings with Advisory Board and stakeholders for program planning and feedback.

Outcomes - Telehealth Services – The expected outcomes from the proposed implementation of teledentistry services through Coffee Telehealth SBHCs include expanded access to dental cares, referrals to dental home, and outreach activities to prevent dental disease, thereby reducing oral health disparities among schoolchildren in Coffee County. If successful, the program expects that the program will also serve as a model to integrate similar teledentistry services into the other seven Coffee Telehealth SBHCs sites.

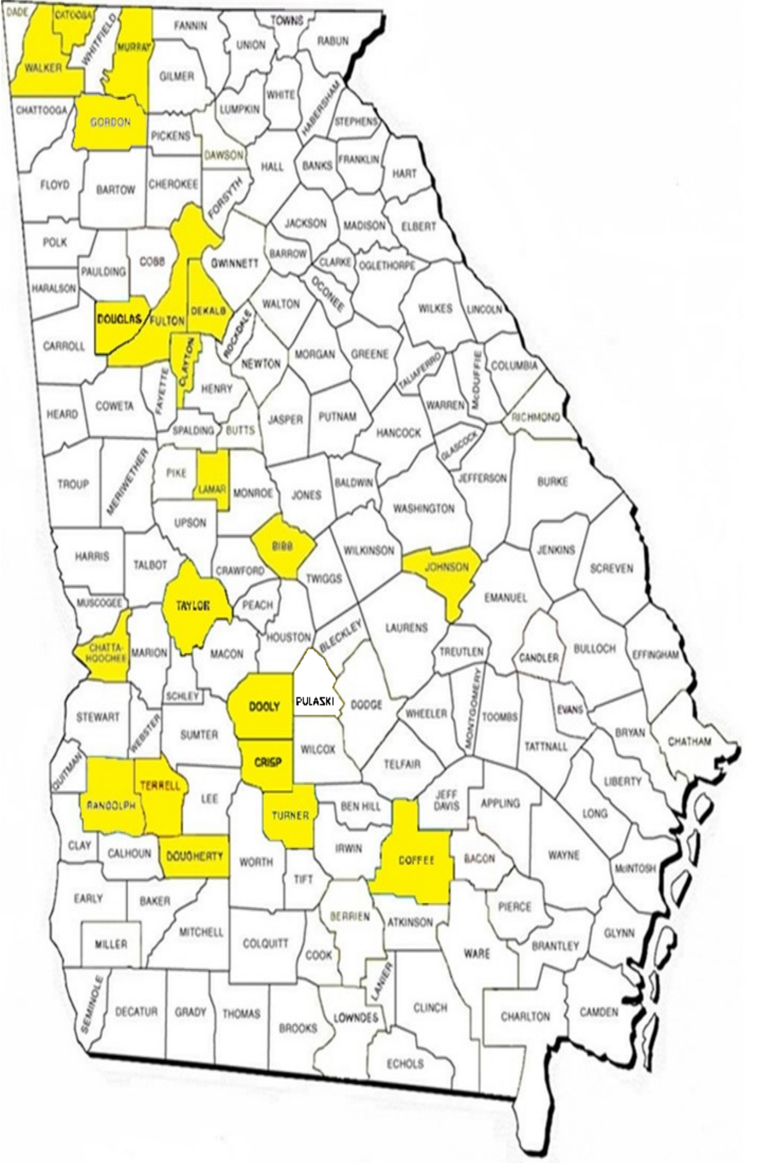
INTRODUCTION

This program proposal is in response to the Health Resources and Services Administration (HRSA) Funding Opportunity Announcement (FOA) Number: HRSA-16-012, *Telehealth Network Grant Program (TNGP),* under the division of the Federal Office of Rural Health, Office for the Advancement of Telehealth. The HRSA TNGP supports programs that provide telehealth services for rural children in clinical areas that focus on asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health. Compared to those living in cities, rural children experience disproportionately greater oral health disparities. In Georgia, the need for dental care providers throughout the state is great, particularly in rural areas. Coffee County, GA is designated as a full health professional shortage area (HPSA) for primary medical care, dental, and mental health.

In 2013, the Coffee County School Board received federal funding from HRSA to develop and implement School-Based Health Centers (SBHCs) and telehealth network sites for primary care services. The county is currently among a small number of counties with existing SBHCs telehealth network sites in the state as shown in **Figure 1**.

In Coffee County, Coffee Telehealth SBHCs are located in all 12 schools, which is made up of two telehealth networks – Coffee Telehealth Program and Coffee Regional Hospital (CRH) School-Based Health Clinic. The Coffee Telehealth Program provides comprehensive adult and pediatric primary care services and operates sites in 11 schools. The CRH SBHC, a midlevel provider, operates at Coffee Middle School, but provides services to staff and students from all twelve schools. Currently, services are only available to students and staff. Services include care for acute illnesses, medication management, mental health, substance abuse, nutrition and personal hygiene counseling and family centered case management.

Figure 1 Georgia School-Based Health Center Map *(As of September 2017)*



Source: Georgia School-Based Health Alliance, 2017

In the Coffee Regional Medical Center's 2016 Community Health Needs Assessment, stakeholders identified dental care and access to care/transportation as top community needs. According to the Department of Public Health (DPH), Georgia has approximately 200 telehealth network sites across the state. However, only a small few have integrated dental care services into their telehealth networks. In 2000, Georgia's Southeast Health District expanded telehealth network services to include teledentistry clinics in Brantley, Charlton and Clinch counties as shown in **Figure 2.**

Figure 2 Map of Telehealth Networks in Georgia that Provide Teledentistry Services.

Source: Georgia Department of Public Health

A recent telephone interview conducted by the pilot program, with the licensed registered nurse located at Coffee Middle's Telehealth SBHC, found that students report experiencing dental pain to nursing staff. This proposal to expand access to oral health services to Coffee County's rural using telehealth network aligns with HRSA's mission, to improve health and achieve health equity through access to quality services, for underserved populations. The TeleSMILE Pilot Program will focus its efforts on developing an integrative and effective teledentistry program within existing SBHCs clinical sites in rural Coffee County in order to expand access to oral health care, and

improve the quality of oral health care services in collaboration with all stakeholders. The fully funded program can be expected to help ensure that children come to school ready to learn with fewer experiences with dental pain, miss fewer days from school because of dental-related illness and appointments; and align with a reliable dental home for sustained, routine and acute-need care *(Journal of Georgia Public Health, 2017)*.

PROJECT NARRATIVE

The purpose of the TeleSMILE Pilot Program is to expand access to oral health care services through existing Coffee Telehealth School-Based Health Centers, and provide dental referrals for continuous care to meet the unmet dental needs of Coffee County children facing barriers to access because of dental provider shortages and geographical location.

Overview of Telehealth Network

Teledentistry merges dentistry and telecommunications through the exchange of dental information and images. This link between the two is used to facilitate dental consultation and treatment planning over long distances. The proposed TeleSMILE pilot program is intended to expand access to oral health care services to Coffee County schoolchildren, and establish dental homes for continuous care. The program will utilize portable dental equipment and real-time video conferencing to screen and assess the oral health status of the target population. No dental care services (e.g., cleanings, sealants, fluoride treatments) will be provided during this phase of the pilot program. The main advantage of utilizing a portable teledentistry is that it reduces or eliminates potential scheduling conflicts with existing telehealth network services. The proposed teledentistry services will be provided by a Georgia certified pediatric dentist and registered dental hygienist. In performing program services, the pilot program plans to establish contracts (MOUs) with school boards, dental providers, dental schools, and public health providers. The programs hours of operation will be established during the planning stage with members of the Coffee County School Board of Education who oversee the schools calendar.

In compliance with Health Insurance Portability and Accountability Act (HIPAA) and Fair Information Practice Principles (FIPP), patient privacy laws and student electronic dental images will be forwarded using cloud-based software that utilizes industry-standard Audio Encryption Standards (AES). The program will use data encryption to send secure messages to facilitate communication between providers, patients, and others, and in transmitting of patient records between sites.

Proposed Pilot Program Activities

The proposed activities include the screening and assessment of students' dental health by a Georgia certified pediatric dentist and a registered dental hygienist, who will be supported by a dental assistant, using video-conferencing. State law requires that the dental hygienist can only practice under the general supervision of a licensed dentist in certain settings, which includes telehealth. The pediatric dentist will be located at a remote hub, and the patient, licensed certified dental hygienist, and the dental assistant will be located at the SBHC site. The proposed activities for each appointment is described below in **Table 7**.

Table 7 Proposed Pilot Program Activities

1. Parent/Caregiver signs consent and medical release forms (HIPAA form). (**Attachment 7.1)**
2. Dental Hygienist reviews patient's medical history.
3. An exam is performed by the dental hygienist using an intraoral (or extraoral camera, if needed) to image patient's teeth and tooth surfaces, which can be seen by the dentist, hygienist, and patient.
4. Hygienist introduces the child to the dentist via video-conferencing and goes over the patient's medical history with pediatric dentist and presents the patient's case.
5. A screening and assessment of the images transmitted via telecommunication technology (e.g., computer, laptop etc.) is then performed by the pediatric dentist.
6. At the end the appointment, the patient will be provided a treatment plan by the dentist, if needed.
7. Case Manager will manage the dental referral process. (**Attachment 7.2**)

Program participants will need a completed Telemedicine Consent Form and Medical Information Release Form (HIPAA Release Form prior to enrollment. (**Attachment 7.1**)

Dental Referrals Activities

The proposed dental referrals process is to ensure the smooth transition to dental home and to remove the patient and family burden of finding continuous care. The pilot program will collaborate with the Southeast Health District, South Central Health District, AU Dental College of Georgia's Department of Pediatric Dentistry, and the private practice dentist in neighboring. Ware County, Georgia to select dental homes for students. The pilot program will establish contracts with network partners for their services. Network partnerships include: dental providers, dental hygienist, dental schools, and public health providers for their services.

*(See **Attachment 7.2** for an example of pilot program's proposed dental referral process)*

Oral Health Education Activities

The pilot program's proposed oral health education activities involve collaboration between the pilot program and *Colgate Bright Smiles, Bright Futures*® to provide free oral health education to students, schools, and at community events. Colgate's mission is to reach children worldwide with free dental screenings and oral health education to children in need. This collaboration is part of the program's efforts to maintain sustainable support.

Billing and Reimbursement

Dental services will be billed by the dental provider and not the pilot program. More than 90 percent of the students in the target population qualify free/reduced price lunch and are insured by ChipCare or Medicaid. Due to Georgia state laws regarding telemedicine/telehealth services, only licensed providers can bill for Medicaid services *(Center for Connected Health Policy, 2017).* No child will be turned away for the inability to pay. Grants will be established to the cover the costs of uninsured/underinsured children.

MEMBERS

The program proposes establishing a Coffee County Oral Health Advisory Board (Advisory Board), in developing an effective local oral health coalition in Coffee County, GA. The pilot program will partner with key stakeholders who are invested in the community. Members of the Advisory Board will include, but not be limited to, representatives from:

- Coffee Regional Medical Center
- Coffee Telehealth School-Based Health Centers
- Coffee County Health Department
- The Dental College of Georgia at Augusta University, Department of Pediatric Dentistry
- Coffee County Target Schools
- Coffee County School System, Board of Education
- Georgia Department of Public Health, Oral Health Division
- Georgia Volunteer Health Care Program
- South East Health District
- South Central Health District
- American Association of Pediatric Dentist

The Advisory Committee, composed of these members listed above, will develop a formal network structure for the proposed teledentistry delivery system that will be linked through both Coffee Telehealth and CRH SBHCs. The committee will hold monthly planning meetings to establish goals, roles, outcomes for the program and review program's progress. A pediatric dentist or representative from The Dental College will provide dental expertise to the planning and implementation process. Activities of the committee will include but are not limited to: 1) informing community about pilot program; 2) identify key personnel, participants, consultants, providers and those affected by a network providing dental care using telehealth technology; 3) enrolling students in pilot program; 4) getting support from school administrators, parents, teachers; and 5) promoting education sessions; and 6) obtaining sustainable funding.

NEEDS ASSESSMENT

Coffee County is located in Georgia's Southeast Health District. Based on 2010 Census Bureau data, the county has a total area of 603 square miles, of which 575 square miles is land area and 28 square miles is water. According to the 2016 County Health Rankings, Coffee County is predominately rural (67 percent). The county has four incorporated municipalities (cities): Ambrose,

Broxton, Nicholls, and Douglas (the county seat). Ambrose, Broxton, Nicholls are classified as 100 percent rural. **Figure 3** shows the municipalities where the target schools are located and illustrates the rural landscape of these areas.

Figure 3 Illustration of Rural Landscape of Coffee County, GA and Location of Municipalities.

Source: coffeecountygov.com

Based on 2010 Census Data, the largest racial group was Caucasian (white) (64.7 percent), followed by African American (black) (26.6 percent), and Hispanic (10.3 percent). According to the 2015 American Community Survey, Coffee County had a population of 43,003, with 29.5 percent of the population under 20 years of age. The unemployment rate of 8.5 percent was higher than state and national averages (7.2 percent, 3.5 percent), and 25.5 percent of individuals were under the poverty level compared to 18.4 percent and 15.5 percent for the state and nation. The median

household income was $33,965, approximately 31.5 percent lower than the state ($49,620) and national ($53,889) averages. According to the Governor's Office of School Achievement (GOSA), over 80 percent of students attending the 12 schools in the county qualified for the Free/Reduced-price Lunch Program in 2016 *(Governor's Office of School Achievement, 2016).*

Health Care Needs

Coffee County is designated by HRSA as a health professional shortage areas (HPSA) for primary medical care, dental and mental health *(Health Resources and Services Administration 2014)*. According to 2016 County Health Rankings, Coffee County had a significantly lower patient-to-provider ratio of dentists, primary care physicians, and mental health providers compared to state and national levels. Based on **Table 8**, the ratio of dentists-to-patients in Coffee County is three times higher than national levels. Also, it shows that the county is in dire need of mental health providers.

Table 8 Comparison of Clinical Care Providers in Coffee County, Georgia *(By County, State, U.S.)*

Clinical Care	Coffee County	Georgia	U.S.
Dentists	3,290:1	2,060:1	1,340:1
Primary Care Physicians	1,800:1	1,040:1	1,540:1
Mental Health Providers	8,560:1	390:1	980:1

Source: County Health Rankings and Roadmaps (2016)

Based on 2016 County Health Rankings, Coffee County had significantly poorer health outcomes compared to state and national averages, as shown in **Table 9**. The number of uninsured children was slightly higher than state average, but more than double the national average (5 percent). The county's childhood mortality rate (per/100,000) was higher compared to state and national levels. In 2016, 42 percent of the county's children lived in single-parent households, an indicator for poor health outcomes.

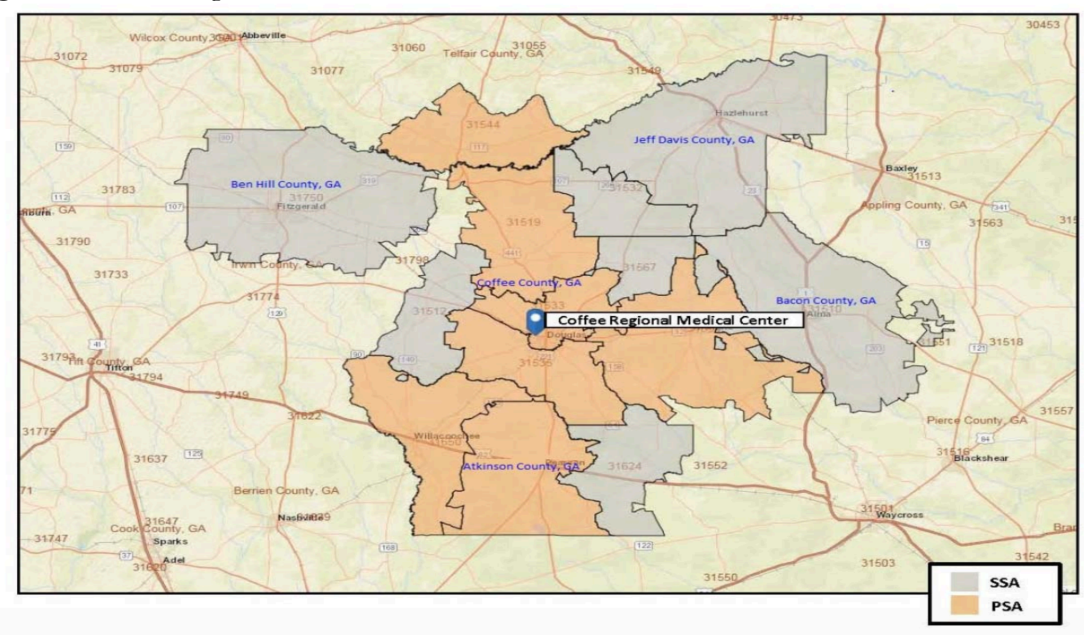
Table 9 2016 Comparison of Health Outcomes in Coffee County (By County, State, U.S.)

Health Outcomes	**Coffee County**	**Georgia**	**U.S.**
Poor or fair health	23%	19%	12%
Child Poverty	39%	26%	13%
Uninsured children	12%	10%	5%
Child mortality	70*	60 *	40*
Children in single-parent households	42%	37%	21%

*per 100,000 Source: County Health Rankings and Roadmaps (2016)

Coffee Regional Medical Center (CRMC), a non-profit, 88-bed acute care hospital, is the sole hospital-provider in Douglas, Georgia and surrounding Coffee County *(Coffee Regional Medical Center, 2016).* The Center's primary service area (PSA) are Coffee and Atkins counties, and secondary service area (SSA) extends to Jeff Davis, Ben Hill, and Bacon counties as shown in **Figure 4**. All counties within hospital's PSA and SSA are designated as HPSAs for primary medical care, dental, and mental health *(Coffee Regional Medical Center, 2016).*

Figure 4 Coffee Regional Medical Center Service Area



Source: Coffee County Regional Medical Center Assessment, 2016

Specialized medical services include Dental and Orthodontic Care unit for patients admitted for trauma or disease affecting the mouth and experiencing dental and oral pain during treatment or hospital stay (Coffee County Regional Medical Center, 2016).

Target Population

The pilot program selected Coffee County, GA based on grant's purpose to: 1) improve access to quality health care services in rural, frontier, and underserved communities, 2) provide telehealth services for rural children that focuses on indicators identified as health disparity indicators (asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health) impacting rural child health status, and use of telehealth to expand access to, coordinate and improve the quality of health care services through SBHCs.

Based the grant's purpose, the target population was selected based on the rural distribution of the schools, pilot program's mission to reduce oral health disparities among rural children, and the Coffee County's established telehealth network of SBHCs. Also, schools (Westside and Coffee Middle) were further selected for attaining the goal of expanding services to minority students, who are most in need of oral health care services. In 2016, 7,431 (GOSA, 2016) students were enrolled in Coffee County schools. The number of students enrolled in target schools is 2,825. The pilot program expects that 2,542 students will eligible for TeleSMILE Pilot Program based on the total average percentages of those receiving free/reduced-price lunch from each school. The proposed target population is described in **Table 10.**

Table 10 Target Population

School	Grade	# of Students	% Race/ Ethnicity	% Free/ Reduced-Price Lunch	Poverty Level	MHI*	Summary
Ambrose Elementary	K-5	370	White–49% Black–12% Hispanic–36% Other–3%	90%	43.1%	$17,778	Ambrose city is 100% rural. Based on 2015 ACS data, Ambrose had a population 410 persons with 192 housing units, median household income of $17,778, and 43.1% of individuals were under the poverty level.
Broxton-Mary Hayes Elementary	K-5	232	White–58% Black–25% Hispanic–13% Other–4%	90%	33.9%	$19,135	Broxton city is 100% rural. Based on 2015 ACS data, Broxton had a population 1,101, 551 housing units, median household income of $19,135, and 33.9% of individuals were under the poverty level.

<table>
<tr><th>School</th><th>Grade</th><th># of Students</th><th>% Race/ Ethnicity</th><th>% Free/ Reduced-Price Lunch</th><th>Poverty Level</th><th>MHI*</th><th>Summary</th></tr>
<tr><td>Nicholls Elementary</td><td>K-5</td><td>312</td><td>White–69%
Black–19%
Hispanic–9%
Other–3%</td><td>90%</td><td>39.7%</td><td>$26,205</td><td>Nicholls city is 100% rural. Based on 2015 American Community Survey data, Nicholls had a population 4,0671, 428 housing units, median household income of $26,205, and 39.7% of individuals were under the poverty level.</td></tr>
<tr><td>Coffee Middle</td><td>6-8</td><td>1,372</td><td>White–48%
Black–30%
Hispanic–18%
Other–3%</td><td>90%</td><td>25.8%</td><td>$31,465</td><td rowspan="2">Douglas city, the county seat, is 98% urban and 2% rural. Based on 2015 ACS data, Douglas had a population 11,750, 4,808 housing units, median household income of $31,465, and 25.8% of individuals were under the poverty level.</td></tr>
<tr><td>Westside Elementary</td><td>K-5</td><td>539</td><td>White–31%
Black–45%
Hispanic–20%
Other–4%</td><td>90%</td><td>25.8%</td><td>$31,465</td></tr>
</table>

*Median Household Income

Source: American Community Survey (ACS), 2015; GOSA, 2016

METHOLDOLOGY

The TeleSMILE Pilot Program's mission is to reduce the incidences of tooth decay and other dental diseases among Coffee County children. This section describes the proposed goals and objectives of the proposed pilot program, which include:

Goals and Objectives

Goal 1: Expand access to oral health care services using teledentistry to rural children in Coffee County, GA, a designated Dental Health Provider Shortage Area (DHPSA**)**

Objective 1.1: Bring care dental care to community sites by forming a partnership with Coffee Telehealth SBHCs and integrating teledentistry services into the network. that allows a pediatric dentist to perform dental screening and consultations at a distant for students in five participating schools.
Objective 1.2: Utilize two-way interaction between a patient and a dentist using audio-videoconferencing technology to expand access to care for school children living in rural areas lacking dental providers.
Objective 1.3: Transform the delivery system of oral health care services to integrate teledentistry services into network that allows a pediatric dentist to perform dental screening and consultations at a distant for students in five participating schools. by using utilizing telehealth technology to remove barriers to access in Coffee County where dental shortages exist.

Goal 2: Establish referrals dental homes to ensure continuous care.

Objective 2:1: Build a network of pediatric dental providers, dental schools, hygienist associations, and dental associations to connect patients to dental homes.
Objective 2.2: Contract with a Nurse/Case Manager to oversee referral services to ensure connections were made and continuous care is being received.

Goal 3: Reduce oral health disparities among rural and minority children.

Objective 3.1: Develop an oral health campaign to educate all Coffee County residents to raise awareness of connection between diet/nutrition using the media, local venues, and community events to promote the message.
Objective 3.2: Continue to collaborate with local/state-wide health coalitions, community organizations, stakeholders with coordinated efforts to improve oral health care in the county.
Objective 3.3: Develop and maintain a county-wide/health district network of leaders for oral health advocacy, planning, and messaging.
Objective 3.4: Develop and plan cultural sensitive programs and messaging outreach activities that target the minority population in Coffee County.

WORK PLAN

(See **Attachment 3** for Proposed Work Plan)

Logic Model

(See **Appendix 5** for proposed TeleSMILE Pilot Program Planning Logic Model)

RESOLUTION OF CHALLENGES

One major challenge would be how health information will be shared with patient's primary care provider. A fully integrated patient record system for medical and oral health systems would meet health information technology (HIT) standards to avoid discrepancies between records and to support quality of care, safety, and cost reduction initiatives *(Rudman, et al, 2010)*. Also, inoperability of medical and dental systems would lead to 1) better communication among medical and dental providers, 2) fewer duplication and inconsistencies with patient medical and dental records, and 3) the elimination of operational barriers when coordinating dental and medical care. A solution to this challenge would be to collaborate with current telehealth networks that already have well-established teledentistry delivery systems, to model the proposed program with Coffee Telehealth SBHCs networks.

The second challenge would be the reluctance of school superintendents or principals to allocate additional time away from classroom education for teledentistry services. A solution would require discussions during the planning and implementation (in case school calendar changes) stages

with superintendents or principals, parents, SBHCs nurses, and the project team to work on a schedule to minimize students time away from the class prior the implementation of the pilot program. A third challenge would be recruiting students and getting parents/teachers buy-in for the pilot program. A solution to this would be surveying to assess parent/teachers attitude toward the pilot program.

A third challenge will be to promote the importance of good oral health and the benefits of the pilot program through oral health education at community events, and in schools in collaboration with the Coffee County Public Health Department. A fourth challenge would be coordinating patient dental visits to avoid conflicts with existing primary care visits. A solution to this would be to collaborate closely with SBHCs with already integrated teledentistry services as a model for setting up similar procedures in Coffee County or have a stand-alone teledentistry system. The TeleSMILE Pilot Program realizes the importance of forming partnerships, working with community leaders and stakeholders, and collaborating with those with prior experience in network development. The solution to this challenge will be to maintain partnerships with these organizations to ensure the success of the proposed pilot program.

EVALUATION AND TECHNICAL SUPPORT CAPACITY

Evaluation

The Summary Report of Dental Services will be the main instrument used to evaluate the program and measure outcomes. The report will include, but not be limited to, these indicators of program effectiveness:

- Number of children returning consent forms
- Number of children served
- Insurance status of each child
- Number of uninsured children receiving treatment
- Number of children referrals for treatment (what)
- Number of children referrals who received treatment (during specified timeframes)

- Number of children referrals to dental homes
- Number of children who established dental homes

Data for the report will be collected 6-9 months after implementation in Grant Year 2, and ongoing through Grant Year 4. Six-months prior to the ending of grant funding, a full evaluation will be conducted to determine the proposed program's effectiveness on patients, parents and teachers and school attendance. Reports will be available to The Advisory Committee, including target schools, to document the pilot program's effectiveness in providing service(s) to the students. TeleSMILE will update Summary Report of Dental Services in a timely manner to evaluate the effectiveness of the pilot program and its referral services.

(See **Attachment 7.4** for the TeleSMILE Pilot Program Summary Report of Dental Services).

Facilities and Other Resources

Facilities – Coffee Telehealth SBHCs currently have facilities in each target school to perform the proposed program activities. Infrastructure requirements will vary based on space availability at each of the facilities. MOUs will be established that clearly define specific responsibilities for utilizing schools/SBHCs facilities and pilot program requirements (e.g., a water supply, sterilized/sterilizable space, etc.).

(See **Attachment 4** for an example of proposed MOUs with SBHCs and Provider Agreements)

Equipment – Coffee Telehealth SBHCs are equipped with portable, not fixed, telemedicine equipment carts. A portable teledentistry delivery system (portable dental clinic) will allow the pilot program to rotate is operations when telemedicine services are being performed at another SBHC site. A portable teledentistry delivery system reduces the potential for scheduling conflicts that may occur if both systems were fixed. The basic dental equipment technology needed to implement the proposed portable teledentistry delivery system include:

Hardware Requirements:

- Laptop with an operating system (Mac or Windows)
- An integrated or external microphone or built-in microphone on laptop

Software Requirements:

- Internet connection (recommended speed 15Mbps downloads/5Mbps uploads).
- Videoconferencing (state-of-the-art)
- Cloud-based software – Patient data will be stored on cloud-based server
- Virtual Private Network (VPN) Software
- Encryption and security software (HIPAA compliant) – Insures patient confidentiality by encrypting all data (audio, video, file sharing)
- Image storage and retrieval programs
- Network interfaces and bridges to achieve interoperability
- Dedicated high speed bandwidth

Portable Dental Equipment:

- Portable dental chairs
- Intraoral camera and extraoral camera (for full face or full arch photographs).
- Digital portable x-ray equipment and sensor – a digital x-ray unit that produces crisp, clear radiographs of teeth and tooth surfaces.
- Dental tools
- Sterilizing equipment

Organizational Information

The TeleSmile Pilot Program has organized a dedicated team with the experience and skillsets needed to accomplish the proposed pilot program's purpose to expand oral health care access and to establish dental homes for rural children living in Coffee County.

(See **Attachment 5** for Biographical Sketches of Key Personnel and **Attachment 6** for proposed Organizational Chart)

Program Team Members

The program director, team members, along with the Advisory Committee, will be key to

pilot program's success. A brief summary of staff experience and responsibilities is described below:

Karen Johnson, MP, Program Director, TeleSMILE Health Connection

Ms. Johnson has over 15 years of program management experience. Ms. Johnson will be responsible for overseeing all aspects of the pilot program's activities. She will also lead efforts in planning, implementing, and evaluating program operations. Other activities will include budgeting, strategic planning, community liaison, and staff manager. She will also be responsible for developing educational material and planning outreach activities.

Sheila Edwards, MBA, Program Coordinator, TeleSMILE Health Connection

Ms. Edwards has over 10 years of experience in project management. She will provide assistant the Program Director with program oversight. Responsibilities also include the collection of evaluation data, budget management, developing and maintaining office documents, verifying consent forms, conducting surveys, and various other duties. Ms. Edwards, work closely with Program Director in the planning of oral health education events. She will also serve as the office contact for providers, contractors, and patients who may have questions or concerns regarding the program.

Gladys Queen, RN, MPH, CCM, Nurse/Case Manager, Queen Consulting, LLC

Ms. Queen has over 30 years of combined experience as a pediatric nurse and a certified case manager (CCM). She will serve within the program as the dental liaison between the pilot program and parents, teachers, school nurses, providers, and others. Ms. Queen will play an important role in scheduling and managing patients during the oral health clinic days and after to help TeleSMILE pilot program manage the program's oral health care services. Ms. Queen will also help obtain consent dental care from parents or caregivers. Her responsibilities also include managing the dental referral process, which includes following-up to close the loop on dental referrals. to increase knowledge and awareness of oral health and other forms of prevention.

Keith Woodward, MS, Information Technology Advisor, Woodward Technology Consulting, LLC

Mr. Woodward has over 25 years of combined experience in information technology and information security systems. He will be responsible providing consultations services on all matters proposed program activities related to information technology during planning, implementation, and evaluation. He will or a designated IT staff member will be available to provide technical support to dental hygienist during patient visits.

TBD - Board Certified Pediatric Dentist, Dental College of Georgia – Augusta University

A pediatric dentist will provide real-time dental consultations with patients and develop treatment plans for patients.

TBD – Registered Dental Hygienist

The dental hygienist will be located at the SBHCs and be responsible for assisting pediatric dentist during patient visits. Responsibilities will include facilitating interaction between the pediatric dentist and patient during the consult. Will be responsible for reviewing patient history with the provider, performing the physical examination of patient's mouth, taking intraoral images of patient's teeth and tooth surfaces to be reviewed by the dentist during the consult, and ensuring that patient is provided a treatment plan.

TBD – Graduate Student Intern, Dental Assistant/Hygienist

A graduate student intern will receive a stipend to assist the dental hygienist in collaboration with the Georgia Department of Public Health's workforce training program.

SUPPORT REQUESTED

The TeleSMILE Pilot Program seeks $300,000 from HRSA TNGP to expand access to dental care services to schoolchildren through the County's Coffee Telehealth SBHCs, which is located at each target school. The lack of access to health care is most frequently identified as a rural health priority *(Bolin et al, 2015)*. According to 2010 Census Bureau data, 13 million children under the age of 18 years (22.3 percent) lived in rural or remote communities in the United States. Geographical location and travel distance have created gaps in oral health disparities among rural-urban children that influence barriers to dental care access. Teledentistry programs throughout the

U.S. have shown to be effective in filling the dental care access gap and reducing oral health disparities among rural children. If funded, the pilot program's proposed activities seek to improve the oral health status of rural children living in Coffee County where significant geographical and dental providers shortages exist all which have been found to be key factors in creating barriers to accessing dental care services. Proposed Projected Budget/Budget Narrative.

The items listed on the project budget are necessary to operate the proposed pilot program. Most of the funding to cover administrative and operating expenses, and other costs that are ineligible for HRSA grant funding will be acquired through a combination of private and public grants (e.g., AAPD, DentaQuest, MCHB), local and state agency budgets, local health departments, local communities, stakeholders, annual fundraising events and campaigns, donations and volunteers. In terms of project goals and objectives and project activities, the proposed budget outlines the costs necessary to carry out the HRSA-supported project activities for the project period September 1, 2017 to August 31, 2021. The proposed projected budget provides justification for the costs. (See **Attachment 2** for the Proposed Budget Information for project period September 1, 2017 to August 31, 2021).

ATTACHMENTS

ATTACHMENT 1
RURAL ID ELIGIBILITY FORM

Rural ID Eligibility

Name of Site:	Coffee Telehealth School-Based Collaborative HealthCare Center, and Coffee Regional Hospital (CRH) School-Based Health Center
Street Address:	1311 South Peterson Avenue, Douglas, GA 31533
County:	Coffee County, GA
Is this a Telehealth Network Rural Originating site or Destination site?	Telehealth Network Rural Originating Site
Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)? Yes/No	Yes
Do application attachment numbers 5& 9 contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No	Yes

ATTACHMENT 2
PROPOSED BUDGET INFORMATION

TeleSMILE Pilot Program Proposed Project Budget
(Project Period: September 1, 2017 – August 31, 2021)

Item	Description	Budget Year
Salaries	Program Director (1 FTE) Program Coordinator (1 FTE) IT Administrator (1 FTE)	Year 1 – Year 4
Equipment	Computers, furniture, office equipment, and dental equipment, dental hygienist tools	Year 1 – Year 2
Supplies	Office, and education	Year 1 – Year 4
Contracts	MOUs with Coffee County School Board/SBHCs, professional providers, other contractors Coffee Telehealth SBHC/CRH (user fee) MOUs with AU-Department of Pediatrics Dental Hygienist Queens Consulting, LLC	Year 1 – Year 2
Cost of space	Monthly office Lease @ Coffee County Health Department	Year 1 – Year 4
Outreach Activities	Oral health kits, educational materials,	Year 2 – Year 4
Stipend	Graduate Dental Assistant	Year 2 – Year 4
Travel Expense	Mileage reimbursement to and from outreach activities, meetings, domestic travel to grantor mandated meeting, etc.	Year 1 – Year 4
Training	Cost of training to use portable dental equipment, training supplies (manuals, travel)	Year 2 – Year 4
Other: Transportation Services (Recipient)	School bus rental fee for outreach activities	Year 2 –Year 4

BUDGET NARRATIVE

Item	Description
Salary	The administrative staff needed to perform the proposed activities of the program: **Program Director** (1 FTE) – provides necessary oversight of the program and proposed program activities. **Program Coordinator** (1 FTE) provides necessary administrative support to the Program Director and staff. Coordinates proposed daily program activities. **IT Administrator** (.5 FTE) – provides necessary IT support to implement and maintain telehealth system for proposed activities.
Supplies	Items that the project will need for office medical, and educational purposes. Office supplies: paper, pencils, postage, including binders, file folders, printer paper, toner, staples, etc. Dental supplies: plastic gloves, hand tools, disinfectants supplies, disposable, barriers, hand washing supplies, etc. Educational: oral health kits, promotional material posters, etc.
Equipment	The equipment needed to operate the program include computers, office equipment (printer, telephones), dental equipment, office and dental furniture, etc. Most of these purchases will occur in Grant Year 1.
Contracts	Contract fees for professional providers and partnerships: Coffee Telehealth CRH Clinic, Dental College- Department of Pediatrics, dental hygienist, nurse/case manager
Cost of space	Monthly rent and utilities cost necessary for the site location for a pilot program to provide proposed services and activities.
Outreach Activities	Expenses to support activities events that promote the program and oral health (presentation materials, mobile dental clinics, educational material, oral health kits).
Stipend	This position is supported by a periodic stipend (per school term) to cover part of student's tuition in exchange for services. Graduate student selected based on academic standing and school and personal references.
Travel Expenses	Mileage reimbursements for travel around the county to visit SBHCs, attend meetings, training/conferences, visit schools, and stakeholders, etc.
Training	Training for staff and new employees on dental equipment and other activities.
Other	Proposed budget expenses that do not fall under main budget items. Transportation (Recipient): - Due to the lack of transportation services in the county, transportation will be provided for families and children to participate in program activities.

ATTACHMENT 3
PROPOSED PILOT PROGRAM WORK PLAN

WORK PLAN

Goal 1: Expand access to oral health care services to school-children through Coffee County SBHCs using a portable teledentistry delivery system.

Major Objectives	Key Tasks	Person Responsible	Start Date (By Month/ Year in Project Cycle)	End Date (By Month/ Year in Project Cycle)
Form Advisory Board	Solicit key internal and external stakeholders to join Board. Facilitate communication with all stakeholders. Schedule regular meetings until completed.	Program Director/ Advisory Board	September/Year 1	December/Year 1
Plan Program	Conduct surveys to assess community needs (e.g., parent, teachers, providers, SHBCs) (See **Attachment 7.5** for example of surveys) Develop a plan to integrate teledentistry at Coffee Telehealth SBHCs. Establish MOUs with Coffee County School Board/SHBCs (See **Attachment 5** for an example MOU), and professional providers, nurse/case manager)	Program Director/ Advisory Board	September/Year 1	February/Year 2
Implement Program	Schedule date to test and implement the pilot program. Monitor program to see if activities are occurring as planned.	Program Director/ Advisory Board/	June/Year 2	August/Year 2
Evaluate Program	Monitor and evaluate program on an ongoing basis (See **Attachment 7.9** for Summary Report of Dental Services Form)	Program Director	December/Year 2	July/Year 4
Develop Strategic Plan	Meet with stakeholders to review program accomplishments and create plan for sustainable funding.	Program Leadership	January/Year 2	March /Year 2

Goal 2: Establish referrals dental homes to ensure continuous care.

Major Objectives	Key Tasks	Person Responsible	Start Date (By Month/ Year in Project Cycle)	End Date (By Month/ Year in Project Cycle)
Create a network of dental and public health providers	Establish contracts with dental providers, dental schools, hygienist associations, and public health providers	Project Director/ Program Coordinator	November/Year 1	January/Year 2
Refer patients to dental homes and follow-up	Track number of referrals and follow-ups.	Case Manager	June/Year 2	July/Year 4

Goal 3: Reduce oral health disparities among rural and minority children.

Major Objectives	Key Tasks	Person Responsible	Start Date (By Month/ Year in Project Cycle)	End Date (By Month/ Year in Project Cycle)
Expand access to oral health care services to school children	Integrate teledentistry services into Coffee Telehealth SBHCs	Project Team	January/Year 1	June/Year 4
Engage in community outreach and oral health education	Promote oral health education through community and school events. Distribute oral health material that is culturally and age appropriate.	Program Director/ Program Coordinator	July/Year 1	June/Year 4
Identify other barriers that prevent patients from accessing dental care services	Data collected from discussions/surveys with parents, students, schools, reports, etc.	Case Manager	January/Year 2	June/Year 4

ATTACHMENT 4
EXAMPLE OF PROPOSED MEMORANDUM OF UNDERSTANDING (MOU) AND CONTRACTS

(SCHOOL SYSTEM) SCHOOL BASED HEALTH SERVICES

MEMORANDUM OF UNDERSTANDING

THIS AGREEMENT is made and entered into as of **(Date)** by and between **(School System and address)**, and **(Health Center and address)**. This document creates a memorandum of understanding for the purpose of providing on-site school health services.

PURPOSE OF AGREEMENT

A. This document will serve as the operating agreement between **(Health Center)** for the purpose of delivering health care services to students attending **(Targeted School).**

B. The overall goal of this agreement is to develop a comprehensive system of school-based health care services and referral for school-based or school-linked primary health care services for children attending **(Targeted School)** by utilizing the combined resources of these lead agencies and working in partnership with other community based providers of primary health care services. **(School System and Health Center)** collaboration exist as a result of a partnership to promote and ensure physical and mental health care, as well as other support services to students of **(Targeted School).** This partnership includes academic, social, emotional and physical health in an integrated approach toward helping students achieve optimal health status and maximizing their school performance. **(Health Center),** operational for over **(#)** years links primary care services with **(School System),** Student Health Services. Primary Care through **(Health Center)** is the care provided by physicians specifically trained and skilled in comprehensive first contact and continuing care for persons with any undiagnosed sign, symptom, or health concern (the undifferentiated patient) not limited by problem origin (biological, behavioral, or social), organ system or diagnosis. Primary care includes health promotion, disease prevention, health maintenance, counseling, patient education, diagnosis and treatment of acute and chronic illnesses.

C. An additional goal is to establish responsibilities of the entity for State and Federal funding and reporting requirements for School Based Health Centers.

SECTION I TERM

1.1. **Term**. The initial term of the Contract shall commence (**Dates)** and terminate **(Dates)**, with provision for extension.

1.2. **Contract Extension**. The parties shall meet annually in October to consider and negotiate the extension of the Contract after the initial term for an additional Contract Year. For purposes of the Contract, the term "Contract Year" shall mean each one-year period commencing January 1 and ending December 31.

1.3. **Option to Terminate**. Both parties may terminate the Contract upon

providing thirty (60) days written notice.

SECTION II DEFINITIONS

2.1. **Nursing Services** are provided to all students and include:

- Emergency care (first aid, care for ill students, parent notification, and triage/referral)
- Administration of medications and treatments as required
- Immunization screening and reporting as required
- Vision and hearing screening and reporting as required
- Assistance in care coordination and accommodations to meet 504 and IEP
- Mandated reporting of suspected child abuse or neglect
- Communicable disease screening, care management and exclusion as required by district policy
- Assessment, triage and referral to community services and resources (medical, dental, social service, mental health, food, clothing, shelter etc.)
- Medicaid outreach and enrollment
- Health education

- **Preventive Health Care Services** where they are referred to in this agreement are defined as non-curative health services provided to the student by parental consent (unless otherwise allowed by current Georgia law for Confidential Services). These services will follow preventive guidelines and may include:
- Health screening (e.g. Early Periodic Screening and Diagnostic Testing (EPSDT) screening)
- Disease prevention (e.g. immunizations, communicable diseases, etc.)
- Dental services (exam, x-ray, prophy (cleaning) and sealant when indicated)
- Preventive services and education such as nutritional education, mental health screening and high-risk assessments and health maintenance.

2.2. **Primary Health Care Services** are provided in a comprehensive, integrated, and accessible manner and in a sustained partnership with the student, his or her family, and his or her primary care provider in order to promote health manage, or treat chronic disease with parental consent (unless otherwise allowed by current Georgia law for Confidential Services) and are defined as:

- Health Maintenance (well care, immunizations)
- Chronic Disease Management
- Mental health screening and assessment followed with appropriate services
- Acute illness care
- Oral health screenings and assessment followed with appropriate services
- Non-specialty medical, dental - restorative, mental health, and substance abuse interventions
- Referral for other services not available at the health center

2.3. **Support Services** are provided with parental consent (unless otherwise allowed by current Georgia law for Confidential Services) and include:

- Mental health counseling
- Drug and alcohol awareness
- Smoking cessation
- Nutritional counseling
- Support for eating disorders
- Parent education
- Peer education
- Peer counseling
- Health education
- System of Care outreach
- Cultural diversity awareness
- Physical Activity and Exercise awareness

2.4. **Student Health Services** goal is to increase the child's capacity to learn by ensuring his/her health needs are met, and health- related barriers to learning are addressed and managed. This is achieved by the provision of clinical services and health education provided by school nurses and school clinic assistants. Goals of this program include:

- Improve immunization rates
- Provide school based services – general first aid, care for students, medication administration and follow-up
- Improve access to health care
- Collaborate with **(Medical Center)** to provide physical exams and dental services at school
- Reduce incidence communicable diseases (e.g. head lice)
- Provide and improve follow-up on failed vision and hearing screenings
- Ensure safe medication administration
- Readiness for medical emergencies and critical incidents
- Increase access to medical insurance in collaboration with **(School System)**
- Increase interaction and communication with parents
- Decrease communication barriers related to health issues
- Improve or maintain the health status of children
- Provide help with accessing services to families suspected of/or at risk of child maltreatment
- Provide emotional social support to secondary students
-
- Provide health promotion/disease prevention activities in collaboration with others
- Health Education

SECTION III UNDERLYING PRINCIPLES

3.1. **Purpose**. All activities undertaken through this memorandum are for the purposes of increasing the health of children attending **( )** County Schools and supporting the schools' educational mission.

3.2. **Fundamental Goal**. The provision of primary and preventative health services in

selected schools is a fundamental goal of the Memorandum of Understanding.

3.3. **Access to Services**. The partners work collaboratively with other community providers of health services to increase children's access to preventive and primary health services through activities such as school based health centers, school linked health services, and on-site EPSDT and dental screenings.

3.4. **Parental Consent**. Primary health care services from **(Health Center)** will be permitted only with signed parental consent.

3.5. **Established Policies & Procedures of (School System)**. All staff involved in the delivery of nursing services through the school health program agree to work within established policies and procedures of **(School System)** and in accordance with state requirements.

3.6. **Established Policies & Procedures of (Health Center)**. All staff involved in the delivery of primary and preventative health care services through the **(Health Center)** program agree to work within the Policies and Procedures established by **(School System)**.

3.7. **Licensing, Credentials, Criminal Investigation**. All staff involved in the delivery of health care services through **(Health Center)** shall meet appropriate licensing, credentialing requirements and criminal background investigations.

3.8. **(School System) Right to Contract Separately**. Entering into contractual relationships with other entities for the purposes of providing school-based health center services can only be executed with prior knowledge and approval of the Superintendent of **(School System)** or his designee.

3.9. **Minimum Hours of Operation**. **(Health Center)** will provide nursing services during school hours. **(Health Center)** will provide primary health care services designed to meet the health and health related needs of the students of **(Targeted School),** for a minimum of thirty (30) hours per week.

3.10. **Funding Sources**. Funding through **(Defined resources)**

3.11. **Collaboration**. **(School System)** and **(Health Center)** will work collaboratively to meet goals, objectives and requirements of **( )** grant.

SECTION IV SERVICES PROVIDED

Through this agreement the following services will be provided as described in Section II definitions:

1. Nursing Services
2. Preventive Health Care Services
3. Primary Health Care Services.
4. Support Services

MUTUAL RESPONSIBILITIES

4.1. **General Responsibilities**. **(School System)** and **(Health Center)** will commit resources to the activities envisioned. Staffing and other resources to be provided by each agency will be dependent upon their respective resources and appropriations.

Clinic Assistants, Cluster Nurses and Special Needs Nurses are employees of **(School System).** The Physician, Nurse Practitioner or Physician Assistant, Medical Assistants, Dental Assistants, Clinical Social Workers, Dentists, Dental Hygienists, Registration Specialist are employees of **(Health Center)**. **(Health Center)** and **(School System)** are responsible for the payment of wages, benefits and employment related taxes for their respective employees, including any unemployment compensation fund payments; and maintain Workers' Compensation insurance as required by Georgia law.

4.2. **Management Responsibilities**. Mutual Management Responsibilities will include:

A. Development of strategic clinical and administrative goals and objectives
B. Produce quarterly reports.
C. Communication of staffing changes or additions, and supervision of staff
D. Assurance of quality of care through appropriate licensing and credentialing of clinicians and a formalized quality improvement and assurance program
E. Development of clinical and patient care relationships with other health care providers to integrate and coordinate health service delivery to students
F. School nurses, principals other school staff (School Social Worker, Counselor, Parent Liaison, etc.) and teachers will work collaboratively in cases that require follow up of urgent issues
G. Complete periodic surveys to evaluate the program and student needs in accordance with **(Health Center)** policies and procedures
H. Link children in need of health services with available community resources
I. Develop required consents for participation in the programs.
J. Comply with all federal and state laws prohibiting discrimination.
K. Comply with standards set forth in Title II of the Americans with Disabilities Act.
L. Administer the programs in accordance with the revised School Code and State School Aid Act.
M. Follow all **( ) County School System** Communicable Disease Policy and Guideline and other **(Health Center)** occupational safety and health act guidelines regarding transmission of blood borne pathogens such as HIV and Hepatitis B to health care and public safety workers.
N. Provide adequate and sufficient management/supervisory staff to fulfill the obligations under this Agreement.
O. Provide adequate management and supervision of all employees to assure compliance with the Agreement and applicable legal requirements.
P. Take all corrective or enforcement measures, including notification of proper officials, to prevent misconduct or non-compliance with applicable legal requirements.
Q. Shall only use qualified and competent individuals. All parties shall ensure that all personnel are screened, qualified, and successfully tested in

accordance with applicable legal requirements. Upon request by any of the parties for any or no reason, a partner will remove and replace any position.

SECTION V
( ) COUNTY PUBLIC SCHOOLS RESPONSIBILITIES

5.1. **Space and Utilities**. **(School System)** will provide space and utilities to operate the center including (e. g. trash removal, general cleaning) *Appendix E*-Lease Agreement.

5.2. **Promote Program Services**. **(School System)** will promote **(Health Center)** programs to students in need of services. In addition, will ensure access to students and other children living in the surrounding community or schools.

5.3. **Parental Consent**. **(School System)** will assist **(Health Center)** to obtain parental consents.

5.4. **Review Practices**. **(School System)** will intermittently review practices in the clinic to monitor outcomes and compliance with parental consent, request for medical records, release of information and district policies and procedures including but not limited to medication administration, mandated reporting of child abuse and neglect, emergency procedures, palliative care and delegation of health services.

5.5 **Program Collaboration** **(School System)** through Student Health Services will work in partnership with **(Health Center)** to identify, support and develop health programs and services.

SECTION VI
( ) MEDICAL CENTER RESPONSIBILITIES

6.1. **Supplies**. **(Health Center)** will provide supplies for health services provided in the clinic.

6.2. **Cost of Travel/Training**. **(Health Center)** will provide cost of travel conducting clinic business and cost of training for **(Health Center)** personnel.

6.3. **Miscellaneous Cost and Expenses**. **(Health Center)** will provide other miscellaneous cost and expenses related to operate clinic.

6.4. **Medical Supervision**. **(Health Center)** shall have a licensed physician as a medical director who supervises the medical services provided by the clinic. The physician must be available to the provider at all times via direct in-person or telecommunication; must monitor and regularly review the practice of the Physician Assistant (PA) or Nurse Practitioner (NP)'s performance.

6.5. **Dental Supervision**. **(Health Center)** shall have a licensed dentist as a dental director who supervises the dental services provided by the clinic.

6.6. **Student Referrals**. **(Health Center)** will provide referral for primary health care and

dental services for follow up and ongoing primary care services to students who do not otherwise have a medical home.

6.7. **Quality Assurance Plan**. **(Health Center)** will follow **(Health Center)** Board Approved policies and procedures in adherence to HRSA guidelines covered under Federal Tort as standards of clinical practice and accredited through regulating agencies including JCAHO and HRSA.

6.8. **Laboratory Standards**. **(Health Center)** will conform to regulations determined by the accrediting agencies such as JCAHO and or HRSA

6.9. **Criminal Background Investigations**. **(Health Center)** will require all personnel/students conducting business on behalf of **(Health Center)** in schools to authorize **(School System)** to perform criminal background investigations according to established **(School System)** policies and procedures prior to placement in School programs. Confirm the background checks and Risk Management and School Police.

6.10. **List of Employees**. **(Health Center)** will provide a list of employees working in the school programs to **(School System)**. The list will include name, position, address, phone number, and e-mail address. This list will be periodically updated by **(Health Center)** to maintain a roster of current individuals working in school health programs.

SECTION VII
SBHC GRANT MUTUAL RESPONSIBILITIES

7.1. **Advisory Boards.** Form advisory boards. The advisory committee will review clinic policies for parental consent, requests for medical records and release of information to assure that they are in accordance with legislative mandates, **(School System)** policies and procedures and subcontracting agencies policies and procedures. The committee will meet a minimum of four times per year. Representative members to include but not limited to **(Health Center)** staff, Principal, SHS Coordinator & Cluster Nurse, Grants Department, **(Targeted School)** Parent and/or Teacher and Area Superintendent.

7.2. **Grant Applications**. Collaboratively fulfill the provisions delineated in the individual grant applications and related contracts attached to this document as:

Appendix A – **(Targeted School),** Contract and Work Plan

SECTION VIII
SBHC GRANT AT (TARGETED SCHOOL)/ (HEALTH CENTER) RESPONSIBILITIES

8.1. **(Health Center) as Subcontractor**. **(Health Center)** will fulfill the responsibilities of sub-contractor to provide Preventive Health Care Services, Primary Health Care Services and Support Services to students with parental consent at **(Targeted School)** as recipient of the **( ) Grant**. A description of purpose, needs, programming, resources, and budgets is contained in the Grant Contract, Work Plans and Job Descriptions.

Appendix A – **(Targeted School)**, Contract and Work Plan

8.2. **Hours of Operation**. Clinic hours of operation will be consistent with **(School**

System) hours and will be posted with written directives for after hours and weekend care. Any additional hours to exceed **(School System)** will be agreed upon by **(School System)** and **(Health Center)**.

83. **Adequate Staff**. **(Health Center)** will provide adequate staff to meet grant requirements for the SBHC and fulfill the job descriptions (See Appendix D- Job Descriptions) as listed in the table below **(Targeted School)**. Professionals must be certified, licensed, or eligible for certification in Georgia and accredited by an appropriate national certification association or board and fulfill the duties as described in the job descriptions. Each Center will be staffed at a minimum to include the following:

Physician	0.10 FTE
Nurse Practitioner or Physician Assistant	1.00 FTE
Medical Assistants	1.0 FTE
Intake Coordinator	1.0 FTE

SECTION IX
(TARGETED SCHOOL) CSHS RESPONSIBILITIES

9.1. **Services at (Targeted School)**. **(Health Center)** will provide preventive and primary medical, dental, and behavioral health services to students through **(Targeted School)** during school hours. **(Targeted School)** will maintain the school based clinic and staff it according to **(School System)** guidelines. **(School System)** will work in collaboration with **(Health Center)** to ensure the health needs of students are met. Student Health Services with also serve as a liaison between the school system and **(Health Center)**.

9.2. **Funding**. Funding for all clinical, management and support positions for the School Based Health Center will be the responsibility of **(Health Center)**.

9.3. **Program Development**. The development of additional programs at the School Based Health Center will be supplemented to increase student's access to health services such as health education and peer group therapy.

9.4 **Needs Assessment**. A needs assessment is performed of teachers, staff and students on health education needs. The assessment must be approved by **(School System)** following established procedures with Research and Evaluation and Director of School Health Programs. Assessment tool to be determined by **(Health Center)** in collaboration with **(School System)** Health Services Coordinator.

SECTION X
CONFIDENTIAL PRIVACY HEALTH INFORMATION

10.1. **Confidentiality and Privacy**. All students who present to the clinic for services will be seen and assessed by the clinic assistant, Cluster Nurse or Special Needs Nurse. Documentation of visits to the nurse and clinic assistant will be done on the school health records. School health records are governed by the Family Educational Rights and Privacy

Act (FERPA). Students with parental consent will be triaged for medical, dental, and social work services provided by **(Health Center)**. **(Health Center)** Medical Records are governed by Health Insurance Portability and Accountability Act (HIPPA). All staff involved in any of the clinical locations in **(School System)** will abide by policies and procedures with respect to confidentiality and patient health information (PHI).

10.2. **Family Educational Rights**. Student information is protected by the Family Educational Rights & Privacy Act (FERPA). All staff in any of the clinical locations in **(School System)** will abide by policies and procedures with respect to confidentiality and student educational records per the FERPA Compliance Agreement attached to this document as (*Appendix B-FERPA Compliance Agreement*.)

10.3. **Health Insurance Portability Act. (Health Center)** and **(School System)** shall ensure that its directors, officers, employees, contractors and agents do not use private health information received from **(Health Center)** clinical data in any manner that would constitute a violation of the privacy standards of HIPAA. (*Appendix C – See HIPPA Requirements*)

SECTION XI INDEMNIFICATION

11.1. **Indemnification by (Health Center)**. **(Health Center)** agrees to indemnify and defend **(School System)** against and hold **(School System)** harmless from any liability, loss, damage, cost or expense (including attorney fees) based upon any claim, demand, suit or action by any person or entity with respect to any personal injury (including death) or property damages, from any cause whatsoever with respect to **(Health Center)** or the Premises, except for liability resulting from the willful acts or gross negligence of **(School System)**, its employees, agents, invitees or business visitors to the fullest extent permitted by law.

11.2. **Indemnification by (School System)**. **(School System)** agrees to indemnify and defend **(Health Center)** against and hold **(Health Center)** harmless from any liability, loss, damage, cost or expense including attorney's fees based upon any claim, demands, suit or action by any person or entity with respect to any personal injury (including death) or property damages from any cause whatsoever with respect to **(Health Center)** or the premises, except for liability resulting from the willful acts or negligence of **(Health Center)** its employees, agents or businesses, visitors to the fullest extent permitted by law.

SECTION XII MODIFICATIONS TO AGREEMENT

12.1. **Severability**. All rights and remedies conferred under this Agreement or by any other instrument or law shall be cumulative, and may be exercised singularly or concurrently. Failure by **(Health Center)** to enforce any provision of this Agreement shall not be deemed a waiver of future enforcement of that or any other provision. In the event that any portion of this Agreement shall be held to be unenforceable, the remaining portions of this Agreement shall remain in force and effect.

12.2. **Notices**. All notices required under this Agreement shall be in writing and shall be deemed to have been given on the next day by fax or other electronic means or upon personal delivery, or in ten (10) days upon delivery in the mail, first class, with postage prepaid. Notices shall be sent to the addressees indicated below unless written notification of change of address shall have been given.

If to **(School System)** to:

____

Superintendent

(School System) and address

If to **(Health Center)** to:

____

President and Chief Executive Officer

(Health Center) and address

12.3. **Waiver of Breach**. Except as otherwise provided herein, this Agreement shall not be amended or modified, nor shall any waiver of any right hereunder be effective, unless set forth in a document executed by both parties.

12.4. **Binding Agreement**. This Agreement shall bind and inure to the benefit of the parties hereto and their successors and assigns.

12.5. **Conformance**. The parties agree to amend the Agreement, as appropriate, to conform to any new or revised legislation, rules and regulations to which is subject now or in the future including, without limitation, the Privacy Standards, Security Standards or Transactions Standards (collectively "Laws"). If within ninety (90) days of either party first providing written notice to the other of the need to amend the Agreement to comply with Laws, the parties, acting in good faith, are i) unable to mutually agree upon and make amendments or alterations to the Agreement to meet the requirements in question, or ii) alternatively, the parties determine in good faith that amendments or alterations to the requirements are not feasible, then either party may terminate the Agreement upon thirty (30) days prior written notice.

12.6. **Amendments**. Amendments to the memorandum must be made in writing and signed by the proper agents.

12.7. **Periodic Review and Revision.** Periodic Reviews of this agreement necessitated by changes and extensions of those underlying agreements may result in changes to this agreement. These will be mutually agreed upon by both parties and executed by an addendum.

SECTION XIII INSURANCE

13.1. **Types of Insurance**. **(Health Center)** and **(School System)** agree that each shall obtain and maintain in full force and effect such insurance as each deems necessary to cover all insurable risks associated with its obligations under this Agreement and to keep such insurance in force at all times during the term of the Agreement.

13.2. **Evidence of Insurance**. **(School System)**, its Board, and employees shall be named as additional insured for all insurance policies (excluding Workers Compensation) required by Section 17.1, including, but not limited to, the Comprehensive General Liability Coverage not excluding sexual harassment or molestation. An approved certificate of insurance evidencing the required insurance and the additional insureds shall be provided to **(School System)** prior to the commencement of services by **(Health Center)** under this Agreement. The required insurance shall not be cancelable, non-renewable, reduced or materially changed without at least thirty (30) days written notice to **(School System)**. Failure to request or obtain evidence of insurance shall not be construed as a waiver of **(Health Center's)** obligation to provide the required insurance.

13.3. **Adequate Insurance**. **(Health Center)** will maintain insurance as deem necessary by federal, state and local guidelines as deemed through FQHC designated statue and in accordance with agency policies and procedures that are board approved and HRSA sanctioned. **(Health Center)** will furnish on request reasonable evidence of insurance.

SECTION XIV
BILLING FOR SERVICES TO STUDENTS

14.1. **Fee Schedule**. **(Health Center)** shall establish a sliding fee schedule as dictated by the Federal Poverty Guidelines in accordance to HRSA governance. In keeping with Federal governance, a sliding fee discount program that meets program requirements allows individuals and families who are uninsured or underinsured to receive services for a fee that is adjusted based on their ability to pay and assures that equitable charges for services are applied across all health center patients. No one will be denied access to services due to inability to pay.

14.2. **Billing Procedures**. **(Health Center)** will establish a process and maintain billing which does not breach the confidentiality of the clients being served.

SECTION XV
REPORTING AND RECORD KEEPING REQUIREMENTS

15.1 **Urban Health Program (UHP) .** **(Health Center)** will submit reports to Director of Urban Health Program at Emory University as required in the grant agreement between Urban Health Program. All reporting will be provided to **(School System)** Student Health Services. (*Appendix D -UHP Reporting Requirements*.)

15.4. **(Health Center).** **(Health Center)** and **(School System)** will develop a reporting tool and plan for (**Targeted School)** School Based Health Center.

15.5 **Program Roster.** **(Health Center)** will Provide a roster of personnel providing services through the school programs. (*Appendix E-**Health Center** Personnel Roster)*

15.6. **Financial Records.** In accordance to standard accounting principles **(Health Center)** will submit a monthly budget cost detail form with monthly invoice to Urban Health Program detailing expenditures of SBHC funds received through implementation funding. (*Appendix K-Financial Status Report*.)

SECTION XVI MISCELLANEOUS

16.1. **Attached Appendices**. All of the attached appendices form an integral part of the understandings and agreements between the Parties and are as such a part of the Agreement.

16.2. **Non-Assignment**. Neither the Agreement nor any part of it shall be assigned or subcontracted by **(Health Center)** without prior written consent of **(School System)**.

16.3. **Force Majeure**. In the event and to the extent either Party is unable to perform its obligations under this Agreement because of any act of nature, civil disturbance, fire, flood, riot, war, terrorist attack, picketing, strike, lockout, work stoppage, loss of transportation facilities, oil or fuel shortage or embargo, governmental action or any condition or cause beyond such Party's control, such Party shall be excused from performance of the Contract.

SECTION XVII SPECIAL CERTIFICATION

The individual officer signing this agreement certifies by his/her signature that he/she is authorized to sign this agreement on behalf of the responsible governing board, official or agency.

( ) COUNTY PUBLIC SCHOOLS

Dated:____________________________ By: _________________________________

Its: Superintendent____________________

( ) MEDICAL CENTER

Dated: _________________________ By: _______________________________

Its: Executive Director_____________

SAMPLE MEMORANDUM OF UNDERSTANDING

THIS AGREEMENT is executed by and between _______ (hereinafter referred to as "School District") and __________(hereinafter referred to as "Provider") for the purpose of providing needed dental services to students (hereinafter referred to as the "Program").

WHEREAS, it is the intention of the Parties to participate in the Program for the purpose of providing students (hereinafter referred to as "Students" or "Participants") with the opportunity to receive needed dental services provided by Provider and/or their community partners.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, the Parties hereto agree as follows:

I. Scope of Agreement

A. This Agreement forms the basis of mutual understanding and respective responsibilities between the School District and the Provider for providing needed dental services to students.

B. This Agreement will be for a period of one year, with review for continuation of the Program at yearly intervals. Renewal of this Agreement and continuation of the Program will be subject to each Party signing a renewal agreement.

C. School District agrees:

1. To the extent School District is able, provide Students with a safe setting to receive dental care. School District shall provide sufficient oversight of the Program to ensure that it meets the needs of Students.
2. To provide a mutually acceptable place to set up portable equipment or park a mobile facility to provide students with needed dental care.
3. To provide access to toilet facilities and potable water, including hot water.
4. To comply with all applicable laws relating to nondiscrimination.

D. Provider Agrees:

1. To provide all Students who provide written consent of their parent or guardian with the opportunity to receive needed dental care.
2. To ensure parents are informed and consent to the proposed treatment plan.
3. To provide or arrange for the provision of necessary dental services, including preventive, diagnostic and restorative care, to all students with identified need.
4. To provide needed care to at least (#)____uninsured children each _____(day, week, month, visit).

5. To inform the School District in writing of any limitations in the services the Provider is able to provide.
6. To provide the School District with proof of a written contract between Provider and a community-based dentist or dental facility where Students may receive follow-up and/or emergency care when the Provider is out of the area or otherwise unavailable.
7. To provide parents and the school with an information sheet within 48 hours after each Student's dental visit to include:
   a. A list of completed dental procedures and their corresponding dental procedure (CDT) codes
   b. A list of any unmet treatment needs
   c. Contact information for Provider, including contact information during non-business hours
   d. What to do in case of an emergency (including contact information for the local dental provider/clinic with which the Provider has a contract)
   e. Referral information if the child was referred to another dentist/ clinic for any care – to include the reason for the referral and contact information for the dentist/clinic where the child was referred
8. To provide School District with an electronic report at the conclusion of Provider visit or at least monthly, whichever is sooner, to include:
   a. Number of Students returning signed permission slips
   b. Number of Students screened for oral health problems
   c. Number of Students receiving any services
   d. A list of services that were provided and how many times each service was provided
   e. Number of Students that received each service
   f. Insurance status of each Student screened and/or receiving services
9. To provide School District a report that will validate contractual agreements have been met.
10. To comply with all applicable laws relating to nondiscrimination.

II. Term of Agreement

A. This Agreement may be terminated by School District or Provider at any time by giving at least seven (7) days written notice.

B. This Agreement shall be effective from _________(date) to _________(date).

C. This Agreement may be modified at any time by written consent of both Parties.

D. This Agreement constitutes the entire Agreement between the Parties. There is no express or implied Agreement except as stated in this Agreement.

E. All provisions of this Agreement are separate and divisible, and if any part is held invalid, the remaining provisions shall continue in full force and effect.

III. Insurance and Liability

A. School District and Provider shall secure and maintain comprehensive general liability insurance in the amount of $______(write number and then write out words) per occurrence with coverage for incidental contracts. School District shall name Provider and Provider shall name School District by endorsement as an additional insured under its respective policy(s). Further, the Certificate of Insurance shall provide that insurance may not be canceled, nonrenewed, or the subject of material change in coverage or available limits of coverage, except on 30 days' prior written notice. Provider must also provide proof of professional liability insurance coverage.

B. School District agrees to defend, hold harmless, and indemnify Provider and its directors, officers, employees, and agents against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect or consequential loss, liability, damage, claim, cost, charge, demand, or expense, including without limitation, attorneys fees) for injury or death to persons, including employees or other agents of Provider, and damage to property including property of School District, caused by the negligent acts or omissions of School District in the performance of the Agreement. School District's duty to indemnify Provider under this Agreement shall not extend to loss, liability, damage, claim, cost, charge, demand, or expense resulting from Provider's negligence or willful misconduct.

C. Provider agrees to defend, hold harmless, and indemnify School District and its directors, officers, employees, and agents against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect or consequential loss, liability, damage, claim, cost, charge, demand, or expense, including without limitation, attorneys fees) for injury or death to persons, including employees of School District, and damage to property including property of Provider, caused by the negligent acts or omissions of Provider in the performance of the Agreement. Provider's duty to indemnify School District under this Agreement shall not extend to loss, liability, damage, claim, cost, charge, demand, or expense resulting from School District's negligence or willful misconduct.

D. School District's insurance obligations set forth in section A of this

Paragraph III are independent of School District's indemnification and other obligations under this Agreement and shall not be construed or interpreted in any way to restrict, limit, or modify School District's indemnification or other obligations or to limit School District's liability under this Agreement. Provider's insurance obligations set forth in section A of this Paragraph III are independent of Provider's indemnification and other obligations under this Agreement and shall not be construed or interpreted in any way to restrict, limit, or modify Provider's indemnification or other obligations or to limit Provider's liability under this Agreement.

IV. Independent Contractor

Provider is, for all purposes, an independent contractor and shall not be deemed an employee of the School District. Provider specifically acknowledges that it controls the manner and means by which the Program is accomplished, agrees to hold itself out as an independent contractor, and waives any rights to claim that it is an employee of School District under the common law agency test, the economic realities test, or any other legal test.

SCHOOL DISTRICT OFFICIAL	PROVIDER
By: ________________________	By:____________________
Name	Name
Title	Title
Address	Address
Date:_______________________	Date:__________________

ATTACHMENT 5
BIOGRAPHICAL SKETCHES OF KEY PERSONNEL

OMB No. 0925-0001 and 0925-0002 (Rev. 09/17 Approved Through 03/31/2020)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Karen Johnson, MPH

eRA COMMONS USER NAME (credential, e.g., agency login): telesmile

POSITION TITLE: Program Director

EDUCATION/TRAINING **(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)**

INSTITUTION AND LOCATION	DEGREE **(if applicable)**	Completion Date MM/YYYY	FIELD OF STUDY
University of Georgia, Athens, GA	BBA	05/1993	Management
Georgia State University, Atlanta, GA	MPH	05/2004	Health Promotion and Behavior

A. Personal Statement

Pursuing a career in public health has been my desire since I began volunteering many years ago in various communities. I have a huge passion for helping people, especially the poor and underserved. Now my focus is on helping children start off in life developing and maintaining healthier behaviors.

B. Positions and Honors

Positions and Employment

1993-2005 Manager, Georgetown University Hospital, Washington, DC
2005-2012 Program Assistant, Emory University Hospital-Midtown, Atlanta, GA
2012-Present Program Director, Guidepost Community Service Agency

Other Experience and Professional Memberships

2002-Present Member, Georgia Public Health Association

C. Contributions to Science

None

D. Additional Information: Research Support and/or Scholastic Performance

None

OMB No. 0925-0001 and 0925-0002 (Rev. 09/17 Approved Through 03/31/2020)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Shelia Edwards, MBA

eRA COMMONS USER NAME (credential, e.g., agency login): telesmile

POSITION TITLE: Program Coordinator

EDUCATION/TRAINING **(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)**

INSTITUTION AND LOCATION	DEGREE **(if applicable)**	Completion Date MM/YYYY	FIELD OF STUDY
Georgia State University, Atlanta, GA	BS	05/2005	Management
Emory University, Atlanta, GA	MBA	05/2014	Nonprofit Management

A. Personal Statement

None

B. Positions and Honors

Positions and Employment

2000-2010 Program Assistant, Georgia State University, Atlanta, GA
2011-2015 Program Coordinator, Emory University, Atlanta, GA
2015-Present TeleSmile Health Connection, Atlanta, GA

Other Experience and Professional Memberships

2011-Present Association of MBAs

C. Contributions to Science

None

D. Additional Information: Research Support and/or Scholastic Performance

None

OMB No. 0925-0001 and 0925-0002 (Rev. 09/17 Approved Through 03/31/2020)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Gladys Queen, RN, MPH, CCM

eRA COMMONS USER NAME (credential, e.g., agency login): telesmile

POSITION TITLE: Nurse/Case Manager

EDUCATION/TRAINING **(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)**

INSTITUTION AND LOCATION	DEGREE **(if applicable)**	Completion Date MM/YYYY	FIELD OF STUDY
University of California, Berkeley, CA	BS	05/1984	Psychology
University of Maryland, Adelphi, MD	RN	08/1990	Nursing
The George Washington University, Washington, DC	MPH	05/2004	Health Promotion

A. Personal Statement
None

B. Positions and Honors

Positions and Employment

1985-1990 Psychology Assistant, Women Therapy Center, Berkley, CA
1990-2012 Nurse, Georgetown University Hospital, Washington, DC
2012-Present Nurse/Case Manager, Emory University-Midtown, Atlanta, GA

Other Experience and Professional Memberships

1990-Present Member, American Nurses Association
2002-Present Member, Georgia Public Health Association

C. Contributions to Science
None

D. Additional Information: Research Support and/or Scholastic Performance
None

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Keith Woodward, MS

eRA COMMONS USER NAME (credential, e.g., agency login): telesmile

POSITION TITLE: Information Technology Advisor

EDUCATION/TRAINING **(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)**

INSTITUTION AND LOCATION	DEGREE **(if applicable)**	Completion Date MM/YYYY	FIELD OF STUDY
University of Denver, Denver, CO	BS	05/1986	Information Technology
University of Denver, Denver, CO	MS	05/1990	Information Systems Security

A. Personal Statement

None

B. Positions and Honors

Positions and Employment

1986-1990 IT Support Assistant, Cascade Technology, Denver, CO
1990-1993 IT Manager, University of Colorado Hospital, Aurora, CO
1993-1999 Information Security Officer, Clearview Regional Medical Center, Monroe, GA
2000-Present Owner, Woodward Technology Consulting, LLC, Atlanta, GA

Other Experience and Professional Memberships

1990-Present Certified Information Systems Security Professional

C. Contributions to Science

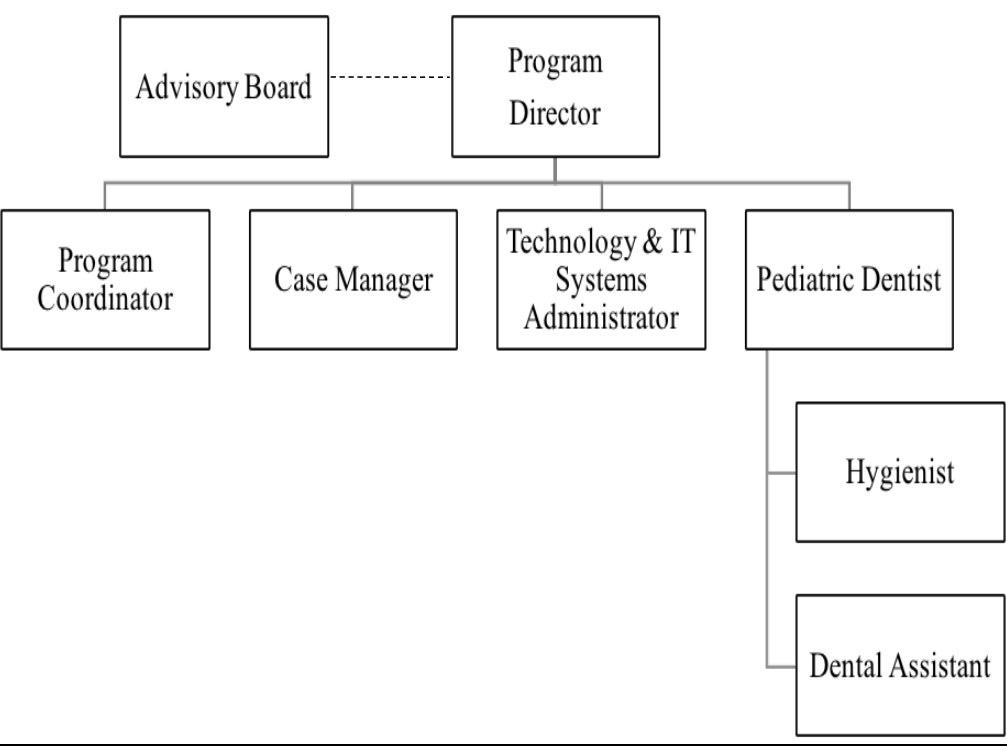
None

D. Additional Information: Research Support and/or Scholastic Performance

None

ATTACHMENT 6
ORGANIZATIONAL CHART

TeleSMILE Pilot Program
Organizational Chart



ATTACHMENT 7 – OTHER DOCUMENTS

ATTACHMENT 7 .1
PATIENT CONSENT AND MEDICAL RELEASE FORMS

NAME________________________________
SCHOOL______________________________
TEACHER__________________ **GRADE**__________

CONSENT FORM

In order for your child to receive services with [Insert Medical Sponsor] at [Insert School Name], this consent form must be completed and proper documentation of insurance obtained. Please complete all sides of this consent form. Please initial the area for acknowledgment of receiving the clinics' Notice of Privacy Policies.

I hereby voluntarily give my consent for ______________________________ to receive the health,

Name of Child

services with [Insert Medical Sponsor] at [Insert School Name]. I further authorize any physician or physician-designated health professional working for the clinic to provide such medical tests, procedures, and treatments as are reasonably necessary or advisable for the medical evaluation and management of my child's health care.

I understand that my signing this consent allows the physician and professional clinic staff of [Insert Medical Sponsor] at [Insert School Name] to provide comprehensive health services which includes physical, behavioral and dental health services. I authorize periodic dental examinations for my child, which may include photographs, radiographs, and any other acceptable methods for the dental evaluation and management of my child's dental health.

I authorize release of information from my son or daughter's medical record to the family doctor or primary care provider designated by me whenever necessary for his or her care including referrals and/or emergency services. I also authorize the Clinic to release information regarding treatment to third party payers such as Medicaid or other insurers for the purposes of billing or for any other reason in accordance with acceptable medical practice pursuant to the law. Medicaid and other insurers will be billed for services rendered. Charges for services rendered to students not insured will be based on a sliding fee scale. **No patients will be denied services because of inability to pay.**

Finally, I give consent to share my child's health information between the school nurse and the school based health center in order to obtain information needed to provide the best healthcare possible.

I have read and understand the above information and give permission for my child's care as described. I also understand that I may obtain further information regarding the health services offered by the clinic by contacting the clinic at **[Insert Phone Number]**. I also understand that I have the right to withdraw this consent at any time upon written notice to the clinic director.

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

______________________	______________________	______________
Name of Patient (PLEASE PRINT)	**Date of Birth**	**Date**

______________________	______________________	______________
Parent or Legal Guardian (PLEASE PRINT)	**Parent or Legal Guardian (PLEASE SIGN)**	**Date**

Revised 5/10/17

NAME____
SCHOOL____
TEACHER_________________________ GRADE___________

Medical Information Release Form (HIPAA Release Form)

Name: ____ Date of Birth: ________/_______/________

Release of Information

I authorize the release of information including the diagnosis, records; examination rendered to me and claims information. This information may be released to:

[ ] Spouse____
[ ] Child(ren)____
[ ] Other relatives_____________________________________
[ ] Information is not to be released to anyone.

This Release of Information will remain in effect until terminated by me in writing.

Messages

Please call
[ ] my home ___________________________
[ ] my work____________________________
[ ] my cell number:______________________
[ ] other number:_______________________

If unable to reach me:
[ ] you may leave a detailed message
[ ] please leave a message asking me to return your call
[ ] other ____

The best day to reach me is __________________between____________ am/pm & ____________am/pm
Signed: ____________________________________ Date: _______/_______/________
Witness: ___________________________________ Date: _______/_______/_________

I understand the **[Insert Medical Sponsor] at [Insert School Name]** is permitted to disclose protected health information about my child for the purposes of payment, continued care or treatment, and healthcare operations. If my child's protected health information includes any records containing information related to the treatment of any infectious disease (including AIDS), drug or alcohol abuse and/or mental illness. I hereby give consent to the disclosure of this information by these clinics only as reasonably necessary to accomplish the purposes described above, and I waive any privileges with regard to such disclosure. I also understand that I can withdraw my consent for disclosure of such information at any time except to the extent action has been taken in reliance upon such consent.

I HAVE RECEIVED THE [Insert Medical Sponsor] at [Insert School Name] SCHOOL HEALTH CLINICS NOTICE OF PRIVACY PRACTICES.

__________________ __________________

Revised 5/10/17

NAME____
SCHOOL____
TEACHER_________________________ GRADE___________

(PLEASE INITIAL) (DATE)

ATTACHMENT 7.2
PROPOSED DENTAL PROVIDER REFERRAL PROCESS

Figure 6.1: Referral workflow from a primary care practice to a dental practice

Primary Care Workflow:
Referral to Dentistry

Clinical assistant asks, looks, makes preliminary decision, and pends referral order

Clinician reviews, completes, and signs referral

Clinical assistant reviews referral expectations

Referral coordinator processes and sends referral

Report is entered in EHR

Patient leaves with referral

Dental Office Workflow:
Referral from Primary Care

Dental office processes referral

Patient makes appointment

Patient has appointment with dentist

Dentist writes consultation report

Dental office sends consultation report to referring clinician office

ATTACHMENT 7.3
PROPOSED SURVEYS

Children's Mercy
HOSPITALS & CLINICS
www.childrensmercy.org

Provider Survey
Telemedicine

Please forward completed copies to Section of Telemedicine
via interoffice mail (1202.02) or via fax (816) 802-1114. Thank you.

Rating Scale: **NA = Not Applicable**
SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

Date of Service: ____________________

	NA	SA	A	N	D	SD
1. The equipment used for this encounter worked properly.	☐	☐	☐	☐	☐	☐
2. The equipment was easy to use.	☐	☐	☐	☐	☐	☐
3. The ancillary exam devices available were sufficient.	☐	☐	☐	☐	☐	☐
4. Distance between myself and the patient was irrelevant regarding access to this patient's records or test results.	☐	☐	☐	☐	☐	☐
5. I was able to communicate adequately with the patient and or family.	☐	☐	☐	☐	☐	☐
6. I felt the privacy of the encounter was respected.	☐	☐	☐	☐	☐	☐
7. I felt the patient and or family was satisfied with the encounter.	☐	☐	☐	☐	☐	☐
8. I was able to deliver the same quality of care via telemedicine as I could have in person.	☐	☐	☐	☐	☐	☐
9. I was able to deliver a better quality of care via telemedicine as I could have in person. *	☐	☐	☐	☐	☐	☐

***If SA or A for # 9, please explain.** ____________________

____

____

____

Additional thoughts: ____________________

____

Provider: ____________________

TeleSMILE Pilot Program
www.telesmile.org
Coffee Telehealth School-Based Health Centers

Parent Survey

Dear Parent:

The **INSERT SCHOOL DISTRICT** and **INSERT LICENSED MEDICAL PROVIDER** are thinking about opening a School--Based Health Center Dental Clinic. Children attending **INSERT NAME OF SCHOOL(S) TO BE SERVED** would be eligible to receive services at the School--Based Health Center. Services include dental screening and assessment of the student's oral health using a teledentistry using video-conferencing technology. Eligibility for the pilot program will be based on those who qualify for free/reduced-price lunch. The pilot program will be bill for its services. Cost of the screening and assessment will be billed by the provider. However, no student would be refused service because of inability to pay.

To help us plan for the School--Based Health Center Dental Clinic, we would like to ask a few questions about the health and dental needs of your child. This information will help us decide what additional types of services and programs to offer at the Center.

Your answers are completely confidential. You do not need to put your name anywhere on this form. Thank you for your help.

1. Do you have a regular source of dental care for your child? ☐Yes ☐ No

2. Have you been told by a doctor that your child should have routine dental check-ups?
   ☐Yes ☐ No

3. Do you regularly take your child for their routine dental care? ☐Yes ☐ No
   How many times in the past 12 months has your child or children been ill enough to stay home for toothaches or dental problems? ☐Yes ☐ No

4. Where do you take your child(ren**)** for dental care? Check all that apply.
   ___ Private Dentist
   ___ Emergency room
   ___ School clinic
   ___ Buy something at the drug store
   ___ Free dental clinics
   ___ Other ________________________________

5. How do you currently pay for dental services?
   ___ Private insurance or belong to an HMO
   ___ Medicaid
   ___ Peach Care
   ___ Armed Services medical plans
   ___ No insurance and generally pay out-of-pocket
   ___ Other___________________________________

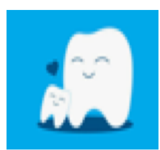
6. What is (are) the reason(s) that your child might not get the dental care he/she needs? (Check all that apply)

   No Transportation
   No money
   No Insurance
   Cultural differences
   Work Schedule
   Family problems
   Dental fear/anxiety
   Provider does not accept your insurance
   Dentist office too far
   Cost to travel
   No dentist in area/county
   Cost too much
   Childcare for other children
   Not a priority
   Other _____________________________

7. If we opened a School-Based Health Center dental clinic, would you sign a consent form for your child to receive a screening and assess of their teeth/dental health status and referral to a dentist, if needed?
   ____Would definitely consent
   ____Would probably consent
   ____Would probably not consent
   ____Would definitely not consent

8. What hours do think are the best times for the dental clinic to be open? Check all that apply.
   ____ Before school
   ____ Evenings
   ____ During school
   ____ Saturdays
   ____ Immediately after school

THANK YOU!



TeleSMILE Pilot Program
www.telesmile.org
Coffee Telehealth School-Based Health Centers

Teacher Survey

Dear Teacher and/or Staff Member:
[Same basic introduction as on previous survey.]

1. We would like your perception on chronic health conditions. Please rate each of the problems listed below on a scale of 1--5 (1 being major, 5 being minor) for children in your classroom.
   _____Asthma
   ____Diabetes
   ____Allergies
   ____Behavior problems
   ____Emotional problems
   ____Dental
   ____Other: ____________________________________

2. How many times in the past 12 months has your child(ren) been ill enough to stay home for A toothache or dental problems?
   _____ 0 times
   _____ 1 – 2 times
   _____ 3- 4 times
   _____ 5 – 6 times
   _____ more than 6 times

3. Do you feel there is a need to add dental care services to the existing network of school-based health clinic at your school?
   ☐Yes ☐ No

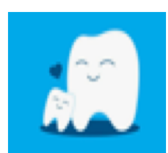
   Please explain____________________________________

4. What do you think we need to keep in mind as we plan for the School-Based Health Center dental clinic? (Check all that apply).
   _____Services
   _____Hours
   _____Prevention
   _____Intervention
   _____Student time away from classroom
   _____Interruption for Teachers (e.g., reassigning classwork)
   _____Other____________________________________

5. What hours do think are the best times to operate a dental clinic for students? (Check all that apply.)
   _____Before school
   _____Evenings
   _____During school
   _____Saturdays
   _____Immediately after school

6. How likely would use the dental clinic if services were offered for the staff?
   ____Would definitely use
   ____ Would probably use
   ____Would probably not use
   ____Would definitely not use

Thank You!



TeleSMILE Pilot Program
www.telesmile.org
Coffee Telehealth School-Based Health Centers

School-Based Health Center/Clinic Nursing Staff Survey

Dear Teacher and/or Staff Member:

[Same basic introduction as on previous survey.]

1. We would like your perception on chronic health conditions. Please rate each of the problems listed below on a scale of 1--5 (1 being major, 5 being minor) for children in your classroom.
   _____Asthma
   _____Diabetes
   _____Allergies
   _____Dental
   _____Behavior problems
   _____Emotional problems
   _____Dental
   _____Other: ____

2. How many times in the past 12 months has a child report experiencing dental pain to the nursing staff?
   ______0 times
   ______1 – 2 times
   ______3- 4 times
   ______5 – 6 times
   ______more than 6 times

   If more than 2 times, were parents notified? ☐Yes ☐ No
   Was their primary care provider notified? ☐Yes ☐ No
   Were they referred to a dental provider for care? _☐Yes ☐ No

3. Do you feel there is a need to add dental care services to the existing network of school-based health clinic located at your school? ☐Yes ☐ No

   Please explain____

4. How many times in the past 12 months has your child or children been ill enough to stay home for toothaches or dental problems? ☐Yes ☐ No

5. What do you think we need to keep in mind as we plan for the School-Based Health Center dental clinic? (Check all that apply).
   ____Coordinating with Primary Care Services
   ____Hours
   ____Scheduling
   ____Communication
   ____Space/Facility Needs
   ____Student time away from classroom
   ____Who will maintain student dental records
   ____Other

6. What hours do you think are the best times to operate a dental clinic for students? (Check all that apply.)
   ____Before school
   ____During school
   ____Immediately after school

7. Do you think implementing a portable dental clinic using SBHCs facilities would interfere with the primary care services?
   ____Would definitely interfere with primary care services.
   ____Would probably interfere with primary care services.
   ____Would probably not interfere with primary care services.
   ____Would definitely not use with primary care services.

8. How likely would use the dental clinic if services were offered for the staff?
   ____Would definitely use
   ____Would probably use
   ____Would probably not use
   ____Would definitely not use

Thank You!

ATTACHMENT 7.4
PROPOSED SUMMARY REPORT OF DENTAL SERVICES

Summary Report of Dental Services

For Services: From ________________________ To ________________________

School/County: ________________________________ Grades: _____________

Sociodemographic Data: (Sociodemographic characteristics of the students served)

Race/Ethnicity (%)	
White	
Black	
Hispanic or Latino	
Asian	
Other:	

Gender (%)	
Male	
Female	

Immigrant Status (%)	
Non-Immigrant	
Immigrant	

Age Group (%)	
< 5	
5-6	
7-8	
8-9	
9-10	
11-12	

Indicators	Total	Comments
Number of children returning consent forms.		
Number of children served.		
Number of insured children.		
Number of uninsured children receiving treatment during the event.		
Number of children who visited a dentist in the past year.		
Number of children who visited a dentist in emergency cases.		
Number of children with tooth decay/dental disease.		
Number of children referrals to dental homes.		
Number of dental referrals for treatment (what)		
Number of dental referrals who received treatment (during specified timeframes)		
Number of children who established dental homes		
Number of children referred to case manager (what)		

NOTE: The TeleSMILE Pilot Program reviews patient electronic health records to obtain dental care access data. This report offers an aggregate summary of the data gathered from each participating school during a specified timeframe. This data is used solely to measure outcomes to evaluating and determine the effectiveness of the pilot program. Data will also be used to support sustainability efforts.

References

1. American Academy of Pediatric Dentistry (2017). Healthy Smiles Happy Children. Retrieved from http://www.aapd.org/

2. American Academy of Pediatrics, 2015. The Use of Telemedicine to Address Access and Physician Workforce Shortages. Retrieved from http://pediatrics.aappublications.org/content/pediatrics/early/2015/06/23/peds.2015-1253.full.pdf

3. American Community Survey (2015). Census Bureau. 2011-2015 American Community Survey Data. Census Bureau. Retrieved from https://www.census.gov/data.html.

4. Arizona Department of Health Services (2009). Teledentistry in Arizona- Initial Development. Office of Oral Health. Retrieved from http://www.azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/oral-health/teledentistry-arizona.pdf

5. Beck, M. (2016, June 26). How Telemedicine Is Transforming Health Care, Wall Street Journal. Retrieved from https://www.wsj.com/articles/how-telemedicine-is-transforming-health-care-1466993402

6. Bolin, J., Bellamy, G., Ferdinand, A., et. al., (2015). Rural Healthy People 2020: New Decade, Same Challenges. *Journal of Rural Health*. May;31(3), 326-33.

7. Center for Connected Health Policy (2017). State Telehealth Laws and Reimbursement Policies: A Comprehensive Scan of the United States and the District of Columbia. The National Telehealth Policy Resource Center. Retrieved from http://www.cchpca.org/

8. Center for Disease Control and Prevention (2014). Children's Oral Health. Retrieved from https://www.cdc.gov/oralhealth/children_adults/child.htm

9. Census Bureau (2010), 2010 Census Data. Retrieved from https://www.census.gov/data.html.

10. Center for Disease Control and Prevention (2015). Oral Health. Oral Health Basics. Retrieved from https://www.cdc.gov/oralhealth/basics/index.html

11. Center for Disease Control and Prevention. (2016). Oral Health: Oral Health Disparities. Retrieved from https://www.cdc.gov/oralhealth/oral_health_disparities/

12. Centers for Medicaid and Medicare Services (2017). National Health Expenditures 2015 Highlights. Retrieved from https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/

13. Clark, S., Savitz, L. and Randolph, R. (2001). Rural Children's Health. *Western Journal of Medicine*. Feb; 174(2), 142-147.

14. Coffee Regional Medical Center, Inc. (2016). Community Health Needs Assessment. Retrieved from http://www.coffeeregional.org/sites/default/files/Coffee%20Regional%20CHNA%202016%20%281%29%20Final.pdf

15. County Health Rankings and Roadmaps (2017). Coffee County, Georgia – County Snapshot. Retrieved from http://www.countyhealthrankings.org/app/georgia/2017/rankings/coffee/county/outcomes/overall/snapshot

16. Daniel, S. J. and S. Kumar (2014). Teledentistry: a key component in access to care. Journal of Evidence Based Dental Practices. 14 Suppl: 201-208.

17. DentaQuest Foundation (2013). Programs and Partnerships. Retrieved from http://dentaquestfoundation.org/

18. Department of Agriculture (2017). Rural Poverty and Wellbeing: Child Poverty. Economic Research Service. Retrieved from https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/child-poverty/

19. Department of Health and Human Services (2000). Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health,

20. Dye, B., Li, X., Thorton-Evans, G. (2012). Oral Health Disparities as Determined by Selected Healthy People 2020 Oral Health Objectives for the United States, 2009-2010. Retrieved from https://www.cdc.gov/nchs/data/databriefs/db104.pdf

21. Edelstein, B. and Chinn, C. (2009). Update on Disparities in Oral Health and Access to Dental Care for America's Children. Academic Pediatrics. Dec; 9(6), 415-419.

22. Estai M., Kruger E., Tennant M., Bunt S., Kanagasingam Y. (2016). Challenges in the uptake of telemedicine in dentistry. *Rural and Remote Health*. Retrieved from http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=3915

23. Fos, P., and Hutchison, L. (2010). The State of Rural Oral Health: A Literature Review. Rural Healthy People 2010. Retrieved from http://www.wrha.com/assets/docs/10volume2oralhealth1.pdf

24. Fricton J. and Chen H. (2009). Using teledentistry to improve access to dental care for the underserved. *Dental Clinics of North America*. Jul;53(3),537-548.

25. General Accounting Office (2000). Oral health: dental disease is a chronic problem among low-income populations. Retrieved from http://www.gao.gov/new.items/he00072.pdf

26. Georgia General Assembly (2017). 2017-2018 Regular Session - HB 154
Dental hygienists; perform certain functions under general supervision; authorize. Retrieved from http://www.legis.ga.gov/legislation/en-US/Display/20172018/HB/154

27. Georgia Health Policy Center (2007). Children's Oral Health in Georgia: Progress and Opportunities. Retrieved from http://ghpc.gsu.edu/files/2014/01/OralHealth_5-8-07.pdf

28. Gilchrist, F., Marsham, Z., Deery, C Rood, HD. (2015). The Impact of Dental Caries on Children and Young People: What they have to say? *International Journal of Paediatric Dentistry*, Sep;25(5), 327-338.

29. Glassman, P. (2016). Teledentistry: Improving Oral Health Using Telehealth-Connected Teams. Retrieved from https://comm.ncsl.org/productfiles/83403465/Teledentistry-Improving-Oral-Health.pdf

30. Glassman, P., Harrington, M., Mertz, E., & Namakian, M. (2012a). The Virtual Dental Home: Implications for Policy and Strategy. *Journal of the California Dental Association*, Jul;40(7), 605–611.

31. Glassman, P., Helgeson, M., and Kattlove, J. (2012b). Using Telehealth Technologies to Improve Oral Health for Vulnerable and Underserved Populations. Retrieved from http://www.childrenspartnership.org/wp-content/uploads/2016/06/Using-Telehealth-Technologies-to-Improve-Oral-Health-for-Vulnerable-and-Underserved-Populations_July-2012.pdf

32. Governor's Office of School Achievement (2016). Georgia School Grade Reports. Retrieved from https://schoolgrades.georgia.gov/

33. Guay, A. (2004). Access to dental care: Solving the problem for underserved populations. *Journal of American Dental Association.* Nov;135, 1599-1605.

34. Hall, J. and McGraw, D. (2014). Telehealth to Succeed, Privacy and Security Risks Must Be Identified. Health Affairs 33, no.2 (2014):216-221

35. Hartley, D. (2004). Rural Health Disparities, Population Health, and Rural Culture. Rural Health and Health Care Disparities. *American Journal of Public Health.* Oct;94(10), 1675-1678

36. Health and Human Services (2017a). Federalwide Assurance for the Protection of Human Subjects. Office for Human Research Protections. Retrieved from https://www.hhs.gov/ohrp/

37. Health and Human Services (2017b). Health Information Privacy. Retrieved from https://www.hhs.gov/hipaa/

38. Health Resources and Services Administration (2014a). Shortage designation: health professional shortage areas and medically underserved areas/populations. Retrieved from http://www.hrsa.gov/shortage/

39. Health Resources and Services Administration (2014b). Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas, National Center for Health Workforce Analysis. Retrieved from https://www.ruralhealthinfo.org/pdf/rural-urban-workforce-distribution-nchwa-2014.pdf

40. Health Resources and Services Administration (2015). Maternal and Child Health Bureau, The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation, 2011-2012. Retrieved from https://mchb.hrsa.gov/nsch/2011-12/rural-health/index.html

41. Health Resources and Services Administration (2017a). About HRSA. Retrieved from https://www.hrsa.gov/

42. Health Resources and Services Administration (2017b). About the Maternal and Child Health Bureau. Retrieved from https://mchb.hrsa.gov/

43. Hein, M. (2009). Telemedicine: An Important Force in the Transformation of Healthcare. U.S. Department of Commerce. Office of Health and Consumer Goods. Retrieved from http://www.trade.gov/td/health/telemedicine_2009.pdf

44. Institute of Medicine of the National Academies (2005). Quality through Collaboration: The Future of Rural Health. National Academies Press. Retrieved from https://www.nap.edu/read/11140/chapter/1

45. Institute of Medicine (2011). Report Brief: Improving Access to Oral Health Care for Vulnerable and Underserved Populations. Retrieved from http://www.nationalacademies.org/hmd/~/media/Files/Report %20Files/2011/Improving-Access-to-Oral-Health-Care-for-Vulnerable-and-Underserved-Populations/oralhealthaccess2011reportbrief.pdf

46. Jackson, S., Vann, W., Kotch, J., Pahel, B., Lee, J. (2011). Impact of Poor Oral Health on Children's School Attendance and Performance. *American Journal of Public Health*, 101(10), 1900–1906

47. Jampani, N. D., Nutalapati, R., Dontula, B. S. K., Boyapati, R. (2011). Applications of teledentistry: A literature review and update. *Journal of International Society of Preventive and Community Dentistry*. June;1(2), 37–44.

48. Kabore, H., Smith, C., Bernal, J., Parker, D., Csukas, S., Chapple-McGruder, T. (2014). *The Burden of Oral Health in Georgia.* Georgia Department of Public Health. Retrieved from https://dph.georgia.gov/sites/dph.georgia.gov/files/MCH/OralH/GA %20Burden %20of %20Oral %20Health %20Report_061914 %20NEWEST.pdf

49. Kaiser Family Foundation. (2016). State Health Facts: Dental Care Health Professional Shortage Areas (HPSAs). Retrieved from http://kff.org

50. Kevdar, J., (2015 October 7). Telemedicine is Vital to Reforming Health Care Delivery. Harvard Business Review. Retrieved from https://hbr.org/2015/10/telemedicine-is-vital-to-reforming-health-care-delivery

51. Koppelman, J., (2015). Access to Care Could Worsen as Dentist Shortages Intensify. The Pew Charitable Trusts. Retrieved from http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/09/21/access-to-care-could-worsen-as-dentist-shortages-intensify

52. Martin, A., Wang, E., Probst, J., et. al., (2008). Dental Health Access to Care Among Rural Children: A National and State Portrait. South Carolina Rural Health Center. Retrieved from http://rhr.sph.sc.edu/report/(7-2) %20Dental %20Health %20and %20Access %20to %20Care %20Among %20Rural %20Children.pdf

53. Martin, A., Bellinger, J., Hatala, J., Mitchell, J., and Probst, J. (2012). South Carolina Rural Health Research Center (2012). State Policy Levers for Addressing Preventive Dental Care Disparities for Rural Children: Medicaid Reimbursement to Non-Dental Clinicians for Fluoride Varnish and Dental Hygiene Supervision in Primary Care Safety Net Settings. Retrieved from http://rhr.sph.sc.edu/

54. Majerowicz, A., and Tracy, S., (2010). Telemedicine: Bridging the Gaps in Healthcare Delivery. *Journal of American Health Information Management Association*. May;81(5) 52-56.

55. National Institute of Dental and Craniofacial Research (2014). Strategic Plan: The Burden of Oral Disease. Retrieved from https://www.nidcr.nih.gov/Research/ResearchPriorities/StrategicPlan-2003/BurdenOralDiseases.htm

56. O'Hare, W. (2009). The Forgotten Fifth: Child Poverty in Rural America. Retrieved from http://scholars.unh.edu/cgi/viewcontent.cgi?article=1075&context=carsey

57. Oral Health Workforce Research Center (2016). Case Studies of 6 Teledentistry Programs: Strategies to Increase Access to General and Specialty Dental Services. Retrieved from http://www.chwsny.org/wp-content/uploads/2017/01/OHWRC_Case_Studies_of_6_Teledentistry_Programs_2016.pdf

58. Otto, M. (2007 February 28). *For Want of a Dentist*. The Washington Post. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2007/02/27/AR2007022702116.html

59. Petersen, P. (2004). The burden of oral disease: challenges to improving oral health in the 21st century. *International Dental Journal*. Retrieved from http://www.who.int/oral_health/publications/orh_idj54_03_petersen.pdf

60. Pew Charitable Trusts (2104). Expanding the Dental Team. Retrieved from http://www.pewtrusts.org/~/media/assets/2014/06/27/expanding_dental_case_studies_report.pdf

61. Pew Charitable Trusts (2106). Children's Dental Health Disparities. *Retrieved from http://www.pewtrusts.org/en/research-and-analysis/analysis/2016/02/16/childrens-dental-health-disparities*

62. Qualis Health for the Oregon Primary Care Association (2015). "Body-Mouth-Spirit: Oral Health Integration Project." Retrieved from http://www.safetynetmedicahome.org/change-concepts/organized-evidence-based-care/oral-health

63. Rabinowitz, E. (2016, July 18). Teledentistry Making Waves Across the Country. Dentist's Money Digest. Retrieved from http://www.dmdtoday.com/news/teledentistry-making-waves-across-the-country

64. Ramos-Jorge, J., Pordeus, I., Ramos-Jorge, M., Marques, L., Paiva, S. (2014). Impact of untreated dental caries on quality of life of preschool children: different stages and activity. *Community Dentistry and Oral Epidemiology*. Aug;42(4), 311-322

65. Rocca, M., Kudryk, V., Pajak, J., and Morris, T. (1999). The evolution of a teledentistry system within the Department of Defense. *Proceedings of the AMIA Symposium*, 921–924

66. Rudman, W., Hart-Hester, S., Jones, W., Caputo, N., Madison, M. (2010). Integrating Medical and Dental Records: A New Frontier in Health Information Management. *Journal of American Health Information Management Association*. Oct;81(10), 36-39

67. Rural Health Information Hub. (2017). Healthcare Access in Rural Communities. Retrieved from https://www.ruralhealthinfo.org

68. Schafer, T. and Riggs, B. (2017). Brief Report: Use of Teledentistry Partnership Program to Reach Rural Pediatric Population. *Journal of the Georgia Public Health Association.* Vol. 6(3), pg. 390-392

69. Singer Cohen, R., and Stitzel, J. (2015). Improving Dental Care Access in Rural America. Retrieved from http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2015/11/18/improving-dental-care-access-in-rural-america

70. South Carolina Rural Health Research Center (2008). Dental Health and Access to Care among Rural Children: A National and State Portrait. Retrieved from http://rhr.sph.sc.edu/report/(7-2) %20Dental %20Health %20and %20Access %20to %20Care %20Among %20Rural %20Children.pdf

71. University of the Pacific, Arthur Dugoni School of Dentistry (2016). Report of the Virtual Dental Home Demonstration: Improving the Oral Health of Vulnerable and Underserved Populations Using Geographically Distributed Telehealth –Connected Teams. Pacific Center for Special Care. Retrieved from Pacific_VDH_Factsheets_2015_0903.pdf

72. Welch, A. (2015, September 18). Dental Diseases Cost Billions of Dollars a Year Worldwide. Retrieved from https://www.cbsnews.com/news/dental-diseases-cost-billions-of-dollars-a-year-worldwide/

73. Wheeler, T. (1999). Smile for the camera; telemedicine comes to your dentist office. *Telemedicine Today*. Feb;7(1), 14-5, 42

74. World Health Organization (2010). Telemedicine: Opportunities and Development in Member States. Retrieved from http://www.who.int/goe/publications/goe_telemedicine_2010.pdf

75. World Health Organization (2012). Fact Sheet No. 318: Oral Health. Retrieved from www.who.int/mediacentre/factsheets/fs318/en/

APPENDICES

APPENDIX 1
DISTRIBUTION OF US HEALTHCARE PROVIDERS RESIDING IN RURAL AND URBAN AREAS

National Center for Health Workforce Analysis

Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas

KEY FINDINGS

- Among rural residents, there are more providers in occupations that require *fewer* years of education and training. Among urban residents, there are more providers in occupations that require *greater* years of education and training.
- Some sectors of the health care workforce have proportionately fewer providers living in rural areas, regardless of amounts of education and training.

This factsheet presents the supply and distribution of practitioners in 32 health occupations across urban and rural areas, based on their place of residence. Their distribution is examined through a comparison of the number of providers per capita residing in rural and urban areas. [1]

The data presented in Table 1 show a very specific trend: among rural residents, there are more providers in occupations that require fewer years of education and training, than providers in occupations which require more years of education and training. For example, there are more EMTs and paramedics per capita residing in rural as opposed to urban areas, and more physicians and surgeons per capita residing in urban as opposed to rural areas.

The greater representation of workers with less education and training living in rural areas is further evident within individual sectors of the health care workforce. For example, among nursing occupations, although the combined number of registered nurses (RNs) and licensed practical and licensed vocational nurses (LPNs/LVNs) per capita is similar in rural and urban areas (117.1 and 114.1 per 10,000 people, respectively), rural areas have more LPNs/LVNs per capita, whereas urban areas have more RNs.

Two sectors of the health care workforce, oral health and behavioral health, have proportionately fewer providers living in rural areas regardless of education and training levels. All three key oral health occupations – dentists, dental hygienists and dental assistants – show significantly lower per capita numbers of practitioners residing in rural areas. Similarly, there are fewer behavioral health practitioners (psychologists, social workers, and counselors) in rural areas.

Though this analysis looks at patterns of residence for health care workers, it does not assess the appropriateness of any particular provider-to-population ratio or distribution of occupations and practitioners across urban and rural areas, nor does it draw conclusions as to why variations in distributions, between, or within sectors of the health care workforce exist. Variance in the distribution across urban and rural areas may reflect individual choices or may reflect the fact that some providers are located in/near hospitals or other institutions that are not equally distributed. For some occupations, differences in staffing patterns, education and training opportunities, preferences for care, or dynamics of

[1] Due to data limitations, results presented here can only account for the residence of providers, not their commutes. The American Community Survey (ACS) Public Use Microdata Sample files (PUMS) were used to conduct this analysis. Rural and urban are defined using a method developed by the Economic Research Service at the U.S. Department of Agriculture (USDA) for classifying the Public Use Microdata Area (PUMA) in which a household is located. PUMAs, areas with a minimum population of 100,000, are the geographical units provided in ACS PUMS files. See the "About the Data" section for additional information on geographical definitions and selection rationale for the occupations included.

relationships between wprkers and their communities may be contributing factors among other potential influences.

Table 1. Health Occupations[*] in Urban and Rural Areas, 2008-2010

Occupation	Providers in Rural Areas	Total Providers	Providers per 10K, Rural Areas	Providers per 10K, Urban Areas	Ratio of Per Capita Rural to Urban Providers
Life, Physical, and Social Science Occupations					
Psychologists	15,837	188,708	3.0	6.8	0.45
Community and Social Service Occupations					
Counselors	44,035	295,263	8.4	9.9	0.86
Social Workers	74,972	517,628	14.4	17.4	0.83
Healthcare Practitioners and Technical Occupations					
Chiropractors	9,724	56,979	1.9	1.9	1.00
Dentists	18,673	168,299	3.6	5.9	0.61
Dietitians and Nutritionists	12,405	92,779	2.4	3.2	0.75
Optometrists	5,722	36,858	1.1	1.2	0.90
Pharmacists	33,162	256,918	6.4	8.8	0.72
Physician and Surgeons	68,135	861,463	13.1	31.2	0.42
Physician Assistants	11,942	99,651	2.3	3.4	0.66
Occupational Therapists	10,291	86,728	2.0	3.0	0.66
Physical Therapists	22,890	188,986	4.4	6.5	0.67
Respiratory Therapists	16,373	102,117	3.1	3.4	0.93
Speech-Language Pathologists	16,201	121,963	3.1	4.2	0.75
Registered Nurses	444,688	2,824,641	85.3	93.5	0.91
Health Technologists and Technicians					
Clinical Laboratory Technologists and Technicians	49,655	354,652	9.5	12.0	0.79
Dental Hygienists	23,680	151,933	4.5	5.0	0.90
Diagnostic Related Technologists and Technicians	47,644	314,113	9.1	10.5	0.87
EMTs and Paramedics	38,984	187,686	7.5	5.8	1.28
Health Practitioner Support Technologists and Technicians	87,352	527,657	16.9	17.3	0.98
Licensed Practical and Licensed Vocational Nurses	165,980	690,038	31.8	20.6	1.55
Medical Records and Health Information Technicians	17,552	111,297	3.4	3.7	0.91
Opticians, Dispensing	8,526	54,375	1.6	1.8	0.91
Healthcare Support Occupations					
Nursing, Psychiatric and Home Health Aides	486,925	2,328,702	93.4	72.3	1.29
Physical Therapist Assistant/ Aide	13,700	70,905	2.6	2.2	1.17
Massage Therapists	17,901	139,215	3.4	4.8	0.72
Dental Assistants	42,753	283,593	8.2	9.5	0.87
Medical Assistants and Other Health Support	128,112	845,117	24.6	28.2	0.87
Personal Care Aides	194,582	1,022,998	37.3	32.5	1.15
Medical / Health Services Managers	77,810	560,870	14.9	19.0	0.79
Secretaries/Administrative Assistants	110,512	652,618	21.2	21.3	1.00

[*]Occupations in this table are listed and titled in line with the U.S. Government's Standard Occupational Classification system.

About The Data

The American Community Survey (ACS), conducted by the U.S. Census Bureau, surveys approximately 1 percent of U.S. households annually and obtains information on individuals' occupations and residence. The 2008-2010 ACS three-year file was used in order to improve the precision of estimates. For most estimates, relative standard errors are quite small. All estimates reported in this brief have a relative standard error less than 8 percent.

The ACS public-use files, often referred to as ACS Public Use Microdata Sample (PUMS) files, contain a geographic variable that indicates the Public Use Microdata Area (PUMA) in which a household is located. A PUMA is an area with a minimum population of 100,000; smaller geographical units are not provided in order to protect the confidentiality of survey respondents. Therefore, in this analysis, the geographic factor examined is the provider's household location, not their place of employment. PUMAs can be comprised of multiple counties or subparts of a county. The Economic Research Service at the USDA constructed a classification for each county or county subpart in a PUMA so they could be defined as either metropolitan (metro) or non-metropolitan (non-metro) using the USDA 2003 Rural-Urban Continuum Codes (RUCC). This classification was applied in the analysis presented here. The data file containing the USDA classification of PUMAs as metropolitan or nonmetropolitan was obtained by the Health Resources and Services Administration from USDA in September 2012. RUCC forms a scheme that distinguishes metro counties by the population size of their metro area, and non-metro counties by degree of urbanization and adjacency to a metro area or areas. The Office of Management and Budget's metro and non-metro categories have been subdivided into three metro and six non-metro groupings, resulting in a nine-part county classification. The values of the RUCC that OMB uses to define metro counties are those with RUCC values of 1, 2, or 3. All other counties (values 4 through 9) are defined as non-metro. Of the 2,071 total PUMAs in the US, all of the population lived in metropolitan counties in 1,596 PUMAs (77% of all PUMAs). In 225 PUMAs (11%), the population all lived in a nonmetropolitan county. The remaining 250 PUMAs (12%) contained both metropolitan and nonmetropolitan counties.

The 32 occupations included in this brief were selected based on the following criteria: (1) the occupation is among those with the largest number of jobs as identified by the Standard Occupation Classification (SOC) code, (2) the occupation is among the fastest growing occupations as projected by the U.S. Bureau of Labor Statistics (BLS), and/or (3) the occupation is among the top 35 occupations that have adequate data (i.e., sample sizes) available in the three-year 2008 to 2010 ACS PUMS file. These determinations were made based on the BLS Occupational Employment Statistics National May 2010 Employment and Wage Estimates.

The National Center for Health Workforce Analysis

The National Center for Health Workforce Analysis informs public and private-sector decision-making related to the health workforce by expanding and improving health workforce data, disseminating workforce data to the public, improving and updating projections of the supply and demand for health workers. For more information about the National Center for Health Workforce Analysis please visit our website at http://bhpr.hrsa.gov/healthworkforce/index.html.

APPENDIX 2
HRSA Funding Opportunity Announcement

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Health Resources and Services Administration

Federal Office of Rural Health Policy
Office for the Advancement of Telehealth

Telehealth Network Grant Program

Announcement Type: New
Funding Opportunity Number: HRSA-16-012

Catalog of Federal Domestic Assistance (CFDA) No. 93.211

FUNDING OPPORTUNITY ANNOUNCEMENT

Fiscal Year 2016

Application Due Date: April 8, 2016

Ensure SAM.gov and Grants.gov registrations and passwords are current immediately!
Deadline extensions are not granted for lack of registration.
Registration in all systems, including SAM.gov and Grants.gov,
may take up to one month to complete.

Release Date: February 8, 2016
Issuance Date: February 8, 2016

Carlos Mena, MS
Public Health Analyst
Federal Office of Rural Health Policy
Office for the Advancement of Telehealth (OAT)
Email: cmena@hrsa.gov
Telephone: (301) 443-3198
Fax: (301) 443-1330

Authority: Section 330I(d)(1) of the Public Health Service Act (42 USC 254c-14), as amended; P.L. 114-53

EXECUTIVE SUMMARY

The Health Resources and Services Administration (HRSA), Federal Office of Rural Health Policy (FORHP) is accepting applications for fiscal year (FY) 2016 for the Telehealth Network Grant Program (TNGP). The purpose of this program is to demonstrate how telehealth networks are used to: (a) expand access to, coordinate, and improve the quality of health care services; (b) improve and expand the training of health care providers; and/or (c) expand and improve the quality of health information available to health care providers, and patients and their families, for decision-making. In particular, we wish to encourage telehealth services delivered through school-based health centers/clinics (SBHC), particularly those serving high-poverty populations.

Funding Opportunity Title:	Telehealth Network Grant Program
Funding Opportunity Number:	HRSA-16-012
Due Date for Applications:	April 8, 2016
Anticipated Total Annual Available Funding:	$6,000,000
Estimated Number and Type of Award(s):	Up to twenty (20) grants
Estimated Award Amount:	Up to $300,000 per year
Cost Sharing/Match Required:	No
Project Period:	September 1, 2016 through August 31, 2020 (4 years)
Eligible Applicants:	Eligible applicants include public and private non-profit entities, including faith-based and community organizations, as well as Federally-recognized Indian tribal governments and organizations. [See Section III-1 of this Funding Opportunity Announcement (FOA) for complete eligibility information.]

Application Guide

All applicants are responsible for reading and complying with the instructions included in HRSA's *SF-424 Application Guide,* available online at http://www.hrsa.gov/grants/apply/applicationguide/sf424guide.pdf, except where instructed in this funding opportunity announcement to do otherwise. A short video for applicants explaining the new *Application Guides* is available at http://www.hrsa.gov/grants/apply/applicationguide/.

Technical Assistance

The Federal Office of Rural Health Policy will hold a technical assistance webinar on **Monday, February 29, 2016 at 2:00 PM Eastern Standard Time** to assist applicants in preparing their applications. The technical assistance webinar is open to the general public.

The purpose of the webinar is to review the funding opportunity announcement (FOA), and to provide clarifying information that may be necessary. There will be a Q & A session at the end of the call to answer any questions. FORHP strongly recommends that potential applicants read this FOA prior to the webinar and have the FOA available during the webinar. While participation on the webinar is not required, it is highly recommended that anyone who is interested in applying for

this program plan to attend the webinar. FORHP has found that it is most useful to the applicants when the funding opportunity announcement is easily accessible during the webinar and questions are written down ahead of time for easy reference.

The Adobe Connect webinar link and call-in information are as follows:

Meeting Name: **Telehealth Network Grant Program**
To join the meeting as a guest: **https://hrsa.connectsolutions.com/hrsa-16-012/**

Prior to joining, please test your web connection:
https://hrsa.connectsolutions.com/common/help/en/support/meeting_test.htm.

Toll-free call in number (for audio): **888-790-1954** *(participants must call in to verbally ask questions)*
Participant Passcode for call in number: **4171383**

Instant replay information of call:
Toll-free call in number: 800-839-9140
Passcode: 3516
Available until: April 29, 2016

Table of Contents

I. PROGRAM FUNDING OPPORTUNITY DESCRIPTION 1

1. PURPOSE 1
2. BACKGROUND 2

II. AWARD INFORMATION 2

1. TYPE OF APPLICATION AND AWARD 2
2. SUMMARY OF FUNDING 2

III. ELIGIBILITY INFORMATION 3

1. ELIGIBLE APPLICANTS 3
2. COST SHARING/MATCHING 4
3. OTHER 4

IV. APPLICATION AND SUBMISSION INFORMATION 4

1. ADDRESS TO REQUEST APPLICATION PACKAGE 4
2. CONTENT AND FORM OF APPLICATION SUBMISSION 4
   - *i. Project Abstract* 5
   - *ii. Project Narrative* 6
   - *iii. Budget* 9
   - *iv. Budget Justification Narrative* 11
   - *v. Attachments* 13
3. DUN AND BRADSTREET UNIVERSAL NUMBERING SYSTEM NUMBER AND SYSTEM FOR AWARD MANAGEMENT 17
4. SUBMISSION DATES AND TIMES 18

V. APPLICATION REVIEW INFORMATION 19

1. REVIEW CRITERIA 19
2. REVIEW AND SELECTION PROCESS 23
3. ASSESSMENT OF RISK 25
4. ANTICIPATED ANNOUNCEMENT AND AWARD DATES 25

VI. AWARD ADMINISTRATION INFORMATION 25

1. AWARD NOTICES 25
2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS 25
3. REPORTING 25

VII. AGENCY CONTACTS 27

VIII. OTHER INFORMATION 28

IX. TIPS FOR WRITING A STRONG APPLICATION 30

I. Program Funding Opportunity Description

1. Purpose

This announcement solicits applications for the Telehealth Network Grant Program (TNGP). The primary objective of the TNGP as noted in Section 330I(d)(1) is to demonstrate how telehealth programs and networks can improve access to quality health care services in rural, frontier, and underserved communities. TNGP networks are used to: (a) expand access to, coordinate, and improve the quality of health care services; (b) improve and expand the training of health care providers; and/or (c) expand and improve the quality of health information available to health care providers, and patients and their families, for decision-making.

Networks proposed for this award must consist of at least two of the entities listed in Section III.1.b below. Applications are especially encouraged from networks that will demonstrate how telehealth can expand access to, coordinate and improve the quality of health care services through SBHCs, especially those which may also serve the broader community beyond normal school hours. SBHCs can facilitate expanding access to key health services in schools in rural high poverty areas (https://www.congress.gov/congressional-report/114th-congress/senate-report/74/1). As defined by the Children's Health Insurance Program Reauthorization Act of 2009 (Section 2110(c) (42 U.S.C. 1397jj), a 'school-based health center' means a health clinic that— ''(i) is located in or near a school facility of a school district or board or of an Indian tribe or tribal organization; (ii) is organized through school, community, and health provider relationships; (iii) is administered by a sponsoring facility; (iv) provides through health professionals primary health services to children in accordance with State and local law, including laws relating to licensure and certification; and (v) satisfies such other requirements as a State may establish for the operation of such a clinic. The term 'sponsoring facility' includes any of the following: (i) a hospital, (ii) a public health department, (iii) a community health center, (iv) a nonprofit health care agency, (v) a local educational agency or (vi) a program administered by the Indian Health Service or the Bureau of Indian Affairs or operated by an Indian tribe or a tribal organization.''

Applicants must identify the clinical focus areas for their project and SBHCs are strongly encouraged to provide telehealth services for rural children that focus on: asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health. These conditions were selected from a review of the literature on rural child health status, supported by the HHS Office of the Assistant Secretary for Planning and Evaluation, which identified these as health disparity indicators where telehealth can be an effective way to provide service.[1] According to the School-Based Health Alliance, these are conditions that health providers can positively impact within a school-based setting. (http://www.sbh4all.org/resources/core-competencies/)

In each proposed clinical area, applicants should present data to demonstrate need and set a baseline for current health status for the target population to be served. Applicants should also describe how the use of telehealth technology may improve outcomes for the target population

---

[1] Natzke, B., Homer, L. (September 23, 2015). *Environmental Scan of Programs and Policies Addressing Health Disparities Among Rural Children in Poverty*. Retrieved from https://aspe.hhs.gov/pdf-report/environmental-scan-programs-and-policies-addressing-health-disparities-among-rural-children-poverty

and set targets for that population in each identified clinical area. For example, to demonstrate expanding access to care, applicants would be expected to show how they improved access to health care services that would not reasonably have been available without the use of telehealth technologies. Upon award, applicants will be required to report data including encounters, services delivered, and health outcomes. In the course of establishing those data measures, those baseline measures and targets identified by applicants may be amended at the discretion of HRSA.

To further elaborate on the program's statutory requirements, we seek innovative applications that meet new and emerging needs in a changing health care delivery system with a focus on value and improved health care outcomes. Awardees will take part in a broad program evaluation with common measures to assess across all grantees how the use of this technology affected health care outcomes. Upon award, recipients will be required to report on specific performance measures, such as: (a) types of telehealth network partner settings; (b) the number of encounters by specialty/service, by patient care setting (network facility), and by type of telemedicine encounter; (c) third party and grant reimbursement received for the encounters; (d) new services available in rural areas due to the grant; (e) patient and practitioner travel miles saved by each network facility; (f) number of Practitioner Referrals at each network facility. Additional information on performance measure reporting will be made available to recipients after September 1, 2016.

2. Background

This program is authorized by Section 330I(d)(1) of the Public Health Service Act (42 USC 254c-14(d)(1)). Applicants are asked to explain how they intend to base their project on established clinical evidence, in accordance with the Improving Rural Health Care Initiative included in the FY 2016 President's Budget request. There is an emerging telehealth evidence base as noted in the recent Institute of Medicine (IOM) report, titled "The Role of Telehealth in an evolving Health Care environment" (2012) (http://www.nap.edu/read/13466/chapter/1). To the extent practical, applicants are encouraged to cite how their proposed approach will be based on established practices. This could include citing telehealth-related journal articles that detail approaches that are being replicated in their applications. Applicants are encouraged to work with their State or Regional Telehealth Resource Center in identifying promising practices. As noted below, and in keeping with the legislative requirements, **grants activities must serve rural communities, although the recipients may be located in either urban or rural areas**.

II. Award Information

1. Type of Application and Award

Types of applications sought: New

Funding will be provided in the form of a grant.

2. Summary of Funding

This program will provide funding during federal fiscal years 2016 – 2019. Approximately $6,000,000 is expected to be available annually to fund up to twenty (20) recipients. Applicants may apply for a ceiling amount of up to $300,000 per year. The project period is four (4) years.

Funding beyond the first year is dependent on the availability of appropriated funds for the "Telehealth Network Grant Program" in subsequent fiscal years, satisfactory recipient performance, and a decision that continued funding is in the best interest of the Federal Government as well as compliance with data collection as specified by OAT post award.

Effective December 26, 2014, all administrative and audit requirements and the cost principles that govern federal monies associated with this award will be subject to the Uniform Guidance 2 CFR 200 as codified by HHS at 45 CFR 75, which supersede the previous administrative and audit requirements and cost principles that govern federal monies.

The limitation on indirect cost rates is 15 percent (Section 330I(l)(7) of the Public Health Service Act).

III. Eligibility Information

1. Eligible Applicants

A) Eligibility and Geographic Requirements:

Eligible applicants include rural or urban nonprofit entities that will provide services through a telehealth network. Each entity participating in the networks may be a nonprofit or for-profit entity. Faith-based, community-based organizations and tribal organizations are eligible to apply. Services must be provided to rural areas, although the applicant can be located in an urban area.

In awarding grants, OAT will ensure, to the greatest extent possible, that grants are equitably distributed among the geographical regions of the United States (Section 330I(j)(1) of the Public Health Service Act). As a result, grants could be limited to one per State.

Current and former OAT Telehealth Network recipients are eligible to apply for funds through this announcement for the FY 2016 cycle. If previously funded through the TNGP, then the new TNGP proposed project must differ in sites/services/concept from that previous project.

OAT also recommends that applicants consult their State or Regional Telehealth Resource Center (TRC), to confirm that resources requested for Telehealth Network funding are not otherwise available as technical assistance from the TRC.

B) Composition of the Telehealth Network:

The telehealth network shall include at least two (2) of the following entities (at least one of which shall be a community-based health care provider):

a. school-based health centers;
b. community health centers or other Federally qualified health centers;
c. health care providers, including pharmacists, in private practice;
d. entities operating clinics, including rural health clinics;
e. local health departments;
f. nonprofit hospitals, including community access hospitals;
g. other publicly funded health or social service agencies;
h. long-term care providers;

i. providers of health care services in the home;
j. providers of outpatient mental health services and entities operating outpatient mental health facilities;
k. local or regional emergency health care providers;
l. institutions of higher education; or
m. entities operating dental clinics.

2. Cost Sharing/Matching

Cost Sharing/Matching is not required for this program.

3. Other

Applications that exceed the ceiling amount of $300,000 per year will be considered non-responsive and will not be considered for funding under this announcement.

Any application that fails to satisfy the deadline requirements referenced in *Section IV.4* will be considered non-responsive and will not be considered for funding under this announcement.

NOTE: Multiple applications from an organization are not allowable.

If for any reason (including submitting to the wrong funding opportunity number or making corrections/updates), an application is submitted more than once prior to the application due date, HRSA will only accept the applicant's **last** validated electronic submission, under the correct funding opportunity number, prior to the Grants.gov application due date as the final and only acceptable application.

IV. Application and Submission Information

1. Address to Request Application Package

HRSA ***requires*** applicants for this FOA to apply electronically through Grants.gov. Applicants must download the SF-424 application package associated with this FOA following the directions provided at Grants.gov.

2. Content and Form of Application Submission

Section 4 of HRSA's *SF-424 Application Guide* provides instructions for the budget, budget justification, staffing plan and personnel requirements, assurances, certifications, and abstract. You must submit the information outlined in the Application Guide in addition to the program specific information below. All applicants are responsible for reading and complying with the instructions included in HRSA's *SF-424 Application Guide* except where instructed in the FOA to do otherwise.

See Section 8.5 of the *Application Guide* for the Application Completeness Checklist.

Application Page Limit

The total size of all uploaded files may not exceed the equivalent of **80 pages** when printed by HRSA. The page limit includes the abstract, project and budget narratives, attachments, and letters of commitment and support required in the *Application Guide* and this FOA. Standard OMB-approved forms that are included in the application package are NOT included in the page limit. Indirect Cost Rate Agreement and proof of non-profit status (if applicable) will not be counted in the page limit. **We strongly urge applicants to take appropriate measures to ensure the application does not exceed the specified page limit.**

Applications must be complete, within the specified page limit, and validated by Grants.gov under the correct funding opportunity number prior to the deadline to be considered under the announcement.

Program-Specific Instructions
In addition to application requirements and instructions in Section 4 of HRSA's *SF-424 Application Guide* (including the budget, budget justification, staffing plan and personnel requirements, assurances, certifications, and abstract), please include the following:

i. Project Abstract

See Section 4.1.ix of HRSA's *SF-424 Application Guide*.

The project abstract must be single-spaced and limited to one page in length. In addition to the information provided in the application guide, include the following information:

a) **Funding Preferences** – A funding preference will be granted to any qualified applicant that specifically requests the preference and meets the criteria for the preference listed (see Section V.2.). If you are requesting a funding preference, please state it here.
b) **Service Area** – Briefly identify the geographic service area that the telehealth network serves or will serve, including its size and population. Note how many full and partial Health Professional Shortage Areas (HPSAs) and full and partial Medically Underserved Areas (MUAs) the service area contains. Also note any mental health and/or dental HPSAs. Note any other critical characteristics of the service area and its population.
c) **Needs, Objectives, and Projected Outcomes** – Briefly describe the identified needs and expected demand for services, project objectives, and expected outcomes.
d) **School-Based Health Centers (SBHC) – Indicate the number of SBHCs to be supported through this TNGP opportunity.**
e) **Clinical Services to be Provided** – List clinical services. ***Important: The project must provide clinical services for which performance measures can be developed. In particular, we encourage an emphasis on the SBHC focus areas listed above.***
f) **Actual Patients/Persons Served** – Specify the actual number of unduplicated patients/ persons served during the prior year (specify year start and end dates) at network sites proposed for the TNGP project. Estimate (by site and year) the number of unduplicated patients/persons to be served at each network site during the first year of the project period and in subsequent years 2, 3, and 4.
g) **Self-Assessment** – Briefly describe how the applicant plans to measure their progress achieving the goals stated in their application.
h) **Outcomes - Telehealth Services** – Describe the project's anticipated added value to healthcare using telehealth resulting from the evaluation of the proposed services (e.g., clinical telemedicine, distance learning, and/or informatics).

i) **Additional Activities** – Describe any additional services and activities for which the network is being utilized or will be utilized and include an estimated amount of time (administrative meetings, community meetings, etc.).
j) **Sustainability** – Briefly describe activities to sustain the telehealth network once Federal funding ends.

ii. Project Narrative

This section provides a comprehensive framework and description of all aspects of the proposed project. It should be succinct, self-explanatory and well organized so that reviewers can understand the proposed project.

Use the following section headers for the Narrative:

- *INTRODUCTION - Corresponds to Section V's Review Criterion #1Need*

  The applicant should succinctly describe the purpose of the proposed project. This section should include an overview of the telehealth network, its members and plans for addressing the health care service needs of the target population in rural areas.

- *NEEDS ASSESSMENT - Corresponds to Section V's Review Criteria #1Need and #2Response*

  This section should describe the health care needs of the population living in the target area. The following items must be addressed within the needs assessment:

  1. Describe the target population in the rural area identified by this project and describe the unmet health care service needs that are not available locally. Include the estimated size of the target population and delineate the counties or sub-county areas being addressed by the network project. Appropriate demographic data should be used and cited wherever possible to support the information provided.
  2. Describe the level of poverty experienced by the population in the target area. Compare local data to State and Federal data where possible to highlight the area's unique need. Provide maps and data using the Census Bureau Small Area Income and Poverty Estimates, by visiting the following website: http://www.census.gov/did/www/saipe/data/statecounty/
  3. Provide the 2016 Federal Medical Assistance Percentage (FMAP) for the applicant state(s) and describe how it may relate to need for sites included in the network.
  4. Include a map that shows the location of network members along with the geographic area that will be served through the project. Include any other information that will help reviewers visualize and understand the scope of the proposed activities.
  5. The applicant should identify gaps in existing service and activities that the program and network can perform to fill that gap.
  6. Describe the evidence base or a promising practice to support the proposed project.

- *METHODOLOGY- Corresponds to Section V's Review Criteria#2 Response, , #4 Impact, #6 Support Requested, and #7 Assessing Technology and Integrating Administrative and Clinical Systems*

  In completing this section, the applicant should address how the project will, specifically:

1. Based on the "Needs Assessment" section, define specific goals and objectives for this project. Describe the range of activities and strategies that will be utilized for achieving the project's goals and objectives.
2. Discuss and demonstrate the community's willingness and ability to support the network's solution to the target population. Discuss the strategies to be used for the coordination and integration of care among the patient, their family, the primary physician, the SBHC (where applicable) and the network.
3. Discuss the telehealth reimbursement environment and if Medicaid, CHIP and/or private insurance in the applicant state(s) cover telehealth services.
4. Describe technology requirements and each type of equipment employed along with its relevance to the project, how it contributes to cost-effective, timely, and accurate care, and ease of use.
5. Describe plans and activities to implement the technology with assurances that the technology complies with existing federal and industry standards; that the technologies are interoperable (i.e., are an "open architecture"); and that the proposed technology can be easily integrated into health care practice.

- *WORK PLAN- Corresponds to Section V's Review Criterion #4 Impact, #5 Resources and Capabilities, and #6 Support Requested*

1. Describe the specific activities or steps that will be undertaken to achieve the objectives of the project. Use a time line that includes each activity and identifies responsible staff, including their ability to begin work on September 1, 2016. Describe the plan for managing the project. Provide a short description of the responsibilities of key staff members, and note the full-time equivalent (FTE) each staff person will devote to the project. Identify who, in a leadership position in the applicant organization, will be involved in the project and what their specific role and time commitment will be.
2. Describe: (1) how the clinicians and other key individuals (e.g. consumers, patients, community leaders, youth, families, educators, school administrators) have been and/or will be involved in defining needs and prioritizing services to be delivered; (2) how clinicians, site coordinators, and other key individuals will be oriented to the project and trained; and (3) how clinicians and other champions will be identified and utilized within the project.
3. Describe how the Network will allocate the staff resources to ensure appropriate data collection as specified after award for each of the clinical areas.

- *RESOLUTION OF CHALLENGES - Corresponds to Section V's Review Criteria #3 Evaluative Measures, #4 Impact, #5 Resources and Capabilities, and #7Assessing Technology and Integrating Administrative and Clinical System*

Discuss challenges that are likely to be encountered in designing and implementing the activities described in the Work Plan, and approaches that will be used to resolve such challenges.

1. Identify key challenges and barriers related to network functions as a whole and those related to the service area, such as geographic, socioeconomic, linguistic, cultural, ethnic or other barriers, and discuss how the network plans to overcome identified barriers.

2. Describe how patients will be tracked between different components of the health care delivery system, including SBHCs (where applicable), and how health information will be shared with the patient's primary care provider.
3. Describe how patients who will receive services will be identified and how their assessed needs feed into the program design and link to the telehealth services to be provided.
4. Describe how the applicants will bill for services to third-party public and private insurers and collect and retain those records for use in a broader program evaluation to be conducted by HRSA.
5. Describe the actions to be taken to assure the privacy of patients and clinicians using the system and the confidentiality of information transmitted via the system, including the HHS Office of the National Coordinator for Health Information Technology (ONC) initiatives relating to Electronic Health Records (EHRs), including the Centers for Medicare and Medicaid Services (CMS) initiatives relating to meaningful use, including how the applicant will comply with Federal and State privacy and confidentiality, including HIPAA regulations (implementing the Health Insurance Portability and Accountability Act of 1996 - see http://www.hhs.gov/ocr/hipaa/).
6. Describe, as appropriate, efforts to receive funding and expected assistance from Universal Service Rural Health Care programs (see http://www.universalservice.org/rhc/).

- *EVALUATION AND TECHNICAL SUPPORT CAPACITY- Corresponds to Section V's Review Criteria #3 Evaluative Measures, #5 Resources and Capabilities and #6 Support Requested*

1. In an effort to maximize allocation of award funds towards project activities, the applicant is not required to conduct a formal evaluation but rather a self-assessment at the end of their project period. The self-assessment will provide information to identify the project's strengths and areas for improvement.
2. Applicants will be expected to report on the following: types of telehealth network partner settings; number of encounters and claims submitted and reimbursed by specialty/service, by patient care setting, and by type of telemedicine encounter; service availability in rural areas; patient travel miles saved; and number of practitioner referrals. Additionally, applicants will be expected to track outcomes related to conditions such as asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health for children and adolescents receiving services through SBHCs (where applicable). Applicants should not propose a formal evaluation as that will be done by HRSA across all of the awardees.

- *ORGANIZATIONAL INFORMATION - Corresponds to Section V's Review Criteria#4 Impact, #5 Resources and Capabilities , #6 Support Requested, #7 Assessing Technology and Integrating Administrative and Clinical Systems, and Attachments 3-8*

1. Describe current experience, skills, and knowledge, including individuals on staff, materials published, and previous work of a similar nature.
2. Describe previous activities conducted by the network that have had an impact on improving health in rural areas.
3. Describe the ability of the network member sites and organizations to implement the project, including their ability to build partnerships and community support, and effectively target populations in rural areas.

4. Describe the network governance, including effective coordination of network member activities in the project.
5. Explain the relationship of the network project to the applicant organization's overall strategic/financial plan.
6. Describe how the information provided in the Project Organizational Chart (**Attachment 8**) contributes to the ability of the organization to conduct the program requirements and meet program expectations.
7. Briefly describe how the organization will function in developing or expanding a telehealth network, based on the information provided in Attachments 3 - 8.
   In addition, each partner within the project should:
   - Have a clearly defined role and a specific set of responsibilities for the project;
   - Provide clearly defined resources (e.g., funding, space, staff) to benefit the network;
   - Have a signed and dated Memorandum of Agreement (MOA) (**Attachment 5**) that delineates the member's role and resource contribution, and decisions on equipment placement and responsibility for maintenance throughout the funding period and beyond.

NARRATIVE GUIDANCE

In order to ensure that the Review Criteria are fully addressed, this table provides a crosswalk between the narrative language and where each section falls within the review criteria.

Narrative Section	Review Criteria
Introduction	(1) Need
Needs Assessment	(1) Need (2) Response
Methodology	(2) Response (4) Impact (6) Support Requested (7) Assessing Technology and Integrating Administrative and Clinical Systems
Work Plan	(4) Impact (5) Resources/Capabilities (6) Support Requested
Resolution of Challenges	(3) Evaluative Measures (4) Impact (5) Resources and Capabilities (7) Assessing Technology and Integrating Administrative and Clinical Systems
Evaluation and Technical Support Capacity	(3) Evaluative Measures (5) Resources/Capabilities (6) Support Requested
Organizational Information	(4) Impact (5) Resources/Capabilities (6) Support Requested (7) Assessing Technology and Integrating Administrative and Clinical Systems

iii. Budget

See Section 4.1.iv of HRSA's *SF-424 Application Guide*. Please note: the directions offered

in the SF-424 Application Guide differ from those offered by Grants.gov. Please follow the instructions included in the Application Guide and, *if applicable*, the additional budget instructions provided below.

Reminder: The total project or program costs are the total allowable costs (inclusive of direct **and** indirect costs) incurred by the recipient to carry out a HRSA-supported project or activity.

Applicants must submit a separate program-specific line item budget for each year of requested funding of the proposed project period, and upload it as **Attachment 2**. The program specific line item budget should reflect allocations for each 12 month budget period. Applicants must provide a consolidated budget that reflects all costs for proposed activities, including those for contractors.

Allowable Costs (Section 330I(d)(1))
Use of Grant Funds:

Grant funds may be used for salaries, equipment, and operating or other costs, including the cost of:

1. Developing and delivering clinical telehealth services that enhance access to community-based health care services in rural areas, frontier communities, or medically underserved areas, or for medically underserved populations;
2. Developing and acquiring, through lease or purchase, computer hardware and software, audio and video equipment, computer network equipment, interactive equipment, data terminal equipment, and other equipment that furthers the objectives of the telehealth network grant program;
3. Developing and providing distance education, in a manner that enhances access to care in rural areas, frontier communities, or medically underserved areas, or for medically underserved populations; or
4. Mentoring, precepting, or supervising health care providers and students seeking to become health care providers, in a manner that enhances access to care in the areas and communities, or for the populations described above.
5. Developing and acquiring instructional programming;
6. Providing for transmission of medical data, and maintenance of equipment; and
7. Providing for compensation (including travel expenses) of specialists, and referring health care providers, who are providing telehealth services through the telehealth network, if no third party payment is available for the telehealth services delivered through the telehealth network;
8. Developing projects to use telehealth technology to facilitate collaboration between health care providers;
9. Collecting and analyzing usage statistics and data to document the cost-effectiveness of the telehealth services.

The Consolidated Appropriations Act, 2016, Division H, § 202, (P.L.114-113) states, "None of the funds appropriated in this title shall be used to pay the salary of an individual, through a grant or other extramural mechanism, at a rate in excess of Executive Level II." Please see Section 4.1.iv Budget – Salary Limitation of HRSA's *SF-424 Application Guide* for additional information. Note that these or other salary limitations will apply in FY 2016, as required by law.

iv. Budget Justification Narrative

See Section 4.1.v. of HRSA's *SF-424 Application Guide*

In addition, the TNGP requires the following:

Detailed Budget Information is needed to capture information specific to the proposed telehealth activities. It provides a detailed break-out of how each Network site will expend funds requested for each Object Class Category. The Detailed Budget Information allows the applicant to identify how federal funds will be expended for each proposed site within the network.

The initial budget period for this funding opportunity is from 09/1/2016 – 8/31/2017. The applicant must provide a budget for each year of requested funding for each Object Class category that reflects the cost for proposed activities for each Network member/site. Based on the budget for each Object Class category, the applicant will develop a consolidated budget. The submission for the Detailed Budget in this subsection should be submitted as ***Attachment 2***.

Important - **Each Object Class Category** should be reported on a separate page (or multiple pages if needed based on the number of network sites). The Object Class Categories that should be reported are as follows: Personnel/Fringe Benefits; Travel; Equipment; Supplies; Subcontracts; Other; and Indirect Costs. Each page should identify the Object Class Category and the Name of the Applicant and Network Member site. For each site, indicate if it is located in an urban area or a rural area. The definition of rural sites is based on the Rural Urban Commuting Area Codes (see ***Attachment 1***).

Combined Object Class Totals: On one page, using the identical format for the Detailed Budget discussed above, summarize Federal and Non-Federal Costs for combined costs of all Object Classes for the Applicant and each Network Member Site. *Please include Indirect Costs in the summary worksheets when calculating these totals.*

In subsequent years, if the program-specific line item budget requires changes, then an adequate justification should be provided in the annual non-competing progress report. It is recommended that you present your line item budget in table format, listing each Object Class category for each Network Member Site name (Applicant site first) on the left side of the document, and the program corresponding costs (OAT- Federal Dollars, Other Federal Dollars, Federal Subtotal, Applicant/Network Partners Non-Federal Dollars, State Non-Federal Dollars, Other Non-Federal Dollars, Non-Federal Subtotal Dollars, and Total Dollars) across the top. Please label each site as being rural or urban. Under Personnel, please list each position by position title and name, with annual salary, FTE, percentage of fringe benefits paid, and salary charged to the grant for each site. Equipment should be listed under the name of the site where the equipment will be placed. List the types of equipment to be funded at each site. Only equipment expenditures should be listed here (personnel costs for equipment installation should be listed in the "Other" category). Equipment expenditures are limited to a 40 percent cap per year by statute (Section 330I(l)(2) of the Public Health Service Act). Transmission costs and clinician payments (limited to $90 per session/encounter at each site for the proposed telehealth network) should be listed in the "Other" category. Indirect costs are for applicant sites only and are limited, by statute, to 15 percent of the total budget [Public Health Service Act Section 330I(l)(7)]. The amount requested on the SF-424A and

iv. Budget Justification Narrative

See Section 4.1.v. of HRSA's *SF-424 Application Guide*

In addition, the TNGP requires the following:

Detailed Budget Information is needed to capture information specific to the proposed telehealth activities. It provides a detailed break-out of how each Network site will expend funds requested for each Object Class Category. The Detailed Budget Information allows the applicant to identify how federal funds will be expended for each proposed site within the network.

The initial budget period for this funding opportunity is from 09/1/2016 – 8/31/2017. The applicant must provide a budget for each year of requested funding for each Object Class category that reflects the cost for proposed activities for each Network member/site. Based on the budget for each Object Class category, the applicant will develop a consolidated budget. The submission for the Detailed Budget in this subsection should be submitted as ***Attachment 2***.

Important - **Each Object Class Category** should be reported on a separate page (or multiple pages if needed based on the number of network sites). The Object Class Categories that should be reported are as follows: Personnel/Fringe Benefits; Travel; Equipment; Supplies; Subcontracts; Other; and Indirect Costs. Each page should identify the Object Class Category and the Name of the Applicant and Network Member site. For each site, indicate if it is located in an urban area or a rural area. The definition of rural sites is based on the Rural Urban Commuting Area Codes (see ***Attachment 1***).

Combined Object Class Totals: On one page, using the identical format for the Detailed Budget discussed above, summarize Federal and Non-Federal Costs for combined costs of all Object Classes for the Applicant and each Network Member Site. *Please include Indirect Costs in the summary worksheets when calculating these totals.*

In subsequent years, if the program-specific line item budget requires changes, then an adequate justification should be provided in the annual non-competing progress report. It is recommended that you present your line item budget in table format, listing each Object Class category for each Network Member Site name (Applicant site first) on the left side of the document, and the program corresponding costs (OAT- Federal Dollars, Other Federal Dollars, Federal Subtotal, Applicant/Network Partners Non-Federal Dollars, State Non-Federal Dollars, Other Non-Federal Dollars, Non-Federal Subtotal Dollars, and Total Dollars) across the top. Please label each site as being rural or urban. Under Personnel, please list each position by position title and name, with annual salary, FTE, percentage of fringe benefits paid, and salary charged to the grant for each site. Equipment should be listed under the name of the site where the equipment will be placed. List the types of equipment to be funded at each site. Only equipment expenditures should be listed here (personnel costs for equipment installation should be listed in the "Other" category). Equipment expenditures are limited to a 40 percent cap per year by statute (Section 330I(l)(2) of the Public Health Service Act). Transmission costs and clinician payments (limited to $90 per session/encounter at each site for the proposed telehealth network) should be listed in the "Other" category. Indirect costs are for applicant sites only and are limited, by statute, to 15 percent of the total budget [Public Health Service Act Section 330I(l)(7)]. The amount requested on the SF-424A and

the amount listed on the line item budget must match. It is recommended that ***Attachment 2*** be converted to a PDF to ensure page count does not change when the document is uploaded into www.grants.gov .

***For Revenues by Site (for the budget period)*:** On a single separate page, report as two vertical columns. The left column should list each Network site starting with the Applicant site on the top followed downward by each Network Member Site; and the right column should list a revenue total corresponding to each Applicant/Network Member site. Include this document in **Attachment 2**.

Note: *Indicating past or current Federal support in the non-Federal contribution columns: When filling out the SF-424A budget form, equipment previously purchased with Federal funds (including OAT funds), and personnel supported within the budget year with funds from a Federal agency other than OAT, are counted as recipient dollars.*

Provide a narrative that explains the amounts requested for each line in the budget. The budget justification should specifically describe how each item will support the achievement of proposed objectives. The budget period is for ONE year. However, the applicant **must** submit one-year budgets for each of the subsequent budget periods within the requested project period at the time of application. Line item information must be provided to explain the costs entered in the SF-424A. Be very careful about showing how each item in the "other" category is justified. For subsequent budget years, the justification narrative should highlight the changes from year one or clearly indicate that there are no substantive budget changes during the project period. The budget justification MUST be concise. Do NOT use the justification to expand the project narrative.

Note: Travel should include sufficient funds to support travel costs for up to three (3) individuals to attend a workshop or other meeting for OAT grantees in the Washington DC metropolitan area, each year they are funded.

Transmission Costs: Grant dollars may be used to pay for transmission costs, such as the cost of satellite time or the use of phone lines directly related to the purposes of the project. However, **TNGP** network members must either a) first apply for the Universal Service Administrative Rural Health Care Program to obtain lower transmission rates, or b) document why it is not applicable. For additional information about the provider subsidy program, see the Universal Service Administrative Company (USAC) web site at http://www.usac.org/rhc/ . ***Applicants currently being supported by USAC should indicate what is supported and the amount of support.***

Clinician Payments: Applicants should seek third-party reimbursement for services, if applicable. More than 40 State Medicaid programs now reimburse some level of telehealth services. In addition, some states have instituted all-payer requirements for insurers meaning that if an insurer covers a service face to face then it must cover the same service via telehealth. Given expanding reimbursement for telehealth services, applicants are encouraged to build their sustainability plan around obtaining reimbursement. Applicants for SBHC telehealth services that could be reimbursed by Medicaid, Children's Health Insurance Programs or private insurance, should highlight their ability to catalyze a sustainable network through their State's reimbursement environment.

Applicants may allocate funding from the grant to pay practitioners for telehealth services but only after documenting that the awardee has attempted to seek third-party reimbursement, if possible. Awardees will develop an agreement with HRSA that specifies the bound of grant payment for services after award. In those cases, the payments are restricted to no more than $90 per practitioner per telemedicine session/encounter per site. Practitioners may include a range of health professionals, such as physicians, dentists, nurse practitioners, physician assistants, clinical social workers, clinical psychologists, speech therapists, dietitians, as long as they are actively participating in the telemedicine consult/encounter.

For this program, indirect costs are limited to 15% of the total grant funds and must apply to the activities funded under this program [Public Health Service Act Section 330I(l)(7)] A copy of the most recent indirect cost agreement must be provided as **Attachment 12.** ***Program Income***: Discuss the planning assumptions used to determine the amount of estimated program income indicated in the total project budget. *'Program Income'* is defined as gross income—earned by a recipient, sub-recipient, or a contractor under a grant—directly generated by the grant-supported activity or earned as a result of the award.

Treatment of Program Income - Under the Telehealth Network Grant Program, the program income shall be added to funds committed to the project and used to further eligible program objectives.

Note: The applicant should describe third party telehealth payment opportunities for the respective state(s) or programs for the proposed sites of this project. Documentation of unavailable third party payment must be provided if clinical payments are provided by the Telehealth Network Grant Program. Applicants should demonstrate awareness of evolving policies regarding reimbursement for telehealth services and monitor policy changes during the grant period.

v. Attachments

Please provide the following items in the order specified below to complete the content of the application. Unless otherwise noted, **attachments count toward the application page limit**. Indirect cost rate agreements and proof of non-profit status (if applicable) will not count toward the page limit. **Each attachment must be clearly labeled**.

Attachment 1: Rural ID Eligibility

All applicants are required to submit information regarding each site that will be supported during this project (i.e., Destination site(s), Network Partner Originating sites). Only Telehealth Network Partner Rural Originating sites (network sites that receive Telehealth services through the existing telehealth network and/or supported with TNGP grant funds) will be considered in meeting the rural eligibility test. Respond to each heading below for each Telehealth Network Partner Rural Originating site.

An eligible Telehealth Network is comprised of a Network Destination site(s) that provides, or facilitates healthcare and clinical/human/social services to a number of Network Partner Rural Originating sites. The applicant organization and Network Destination site(s) may be located in an urban or rural area but Telehealth Network Partner Rural Originating site(s) must be in rural areas in order to receive funds through this award. Urban originating site(s) are not eligible to receive grant funding through this award.

For purposes of this funding announcement "rural" 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. This rural definition can be accessed at:
http://datawarehouse.hrsa.gov/RuralAdvisor/ruralhealthadvisor.aspx
If the county is not entirely rural or urban, then follow the link for "Check Rural Health Grants Eligibility by Address" to determine if a specific site qualifies as rural based on its specific census tract within an otherwise urban county.
Rural ID Eligibility Headings: ***HEADINGS REQUIRING RESPONSES:***

- **Name of Site** – List the name of the Network Member Site.
- **Street Address** – Include City, State and Zip Code.
- **County** – List name of County.
- **Is this a Telehealth Network Rural Originating site or Destination site?**
- **Is the Telehealth Network Rural Originating site a School-Based Health Center (SBHC)?** Yes/No
  Do application attachment numbers 5& 9 contain evidence that each Network Member Site is committed to the project for Year 1? Yes/No

Attachment 2: Detailed Budget Information

Include the program-specific line item budget and the Revenue Summary for each year of the proposed project period (see Section IV. iv. Budget for additional information). It is recommended that ***Attachment 2*** be converted to a PDF to ensure page count does not change when the document is uploaded into www.grants.gov .

Attachment 3: Work Plan.

See Section IV.2.ii. Project Narrative for additional information.

Attachment 4: Network Identification Information

Applicants are required to submit information regarding the various applicant/network member sites in the proposed telehealth network.

A. The Applicant Site:

- Network Name (Provide the name of the proposed telehealth network)
- Site name and address
- National Provider Identifier and Primary Taxonomy if the site bills for service. See https://npiregistry.cms.hhs.gov/ If the site name or address do not match the NPI registration, please explain.
- HCP number (if the site receives Universal Service funding). See http://www.usac.org/rhc
- Indicate whether this is a currently active or new destination or originating site (Note: if a new site, indicate the year it will be added to the network)
- If a School-Based Health Center, indicate which of these services it will receive: asthma, obesity reduction and prevention, behavioral health, diabetes, and/or oral health

- Name, address, designated contact person, phone, fax, email, and URL for the applicant
- County where applicant site is located
- Population of County where applicant site is located
- Indicate whether the applicant site is located in the following areas:
  - (i) An urban or rural area
  - (ii) A Health Professional Shortage Area (HPSA)
  - (iii) A Partial Health Professional Shortage Area (p-HPSA)
  - (iv) A Medically Underserved Area (MUA)
  - (v) A Partially Medically Underserved Area (p-MUA)
- Description of the site's facility
  - a. School-Based Health Center
  - b. community health center or other Federally Qualified Health Center
  - c. health care provider, including a pharmacist, in private practice
  - d. entity operating a clinic, including a Rural Health Clinic
  - e. local health department
  - f. nonprofit hospital, including a Critical Access Hospital
  - g. other publicly funded health or social service agency
  - h. long-term care provider
  - i. provider of health care services in the home
  - j. provider of outpatient mental health services and an entity operating an outpatient mental health facility
  - k. local or regional emergency health care provider
  - l. institution of higher education
  - m. entity operating a dental clinic

B. Successive Network Member Sites:
Successive pages of information should be used to identify each individual network member site in the network, by including the information listed above for each site. At the top of each successive network member site, label each network member site appropriately (Site #2 of total # of Sites, Site #3 of total # of Sites, and so on).

Attachment 5: Memorandum of Agreement and/or Description(s) of Proposed/Existing Contracts:

Provide any documents that describe working relationships between the applicant agency and each member of the network, as part of the application for this FOA. Each Memorandum of Agreement shall be executed by the listed contact in the application or other appropriate official from the originating site with authority to obligate the originating site to the project. The Memorandum of Agreement will include a cover page on the letterhead of each respective originating site. Each memorandum will be tailored to the particular originating site and contain, as a minimum, the originating site's (a) clearly defined roles and specific set of responsibilities for the project; (b) clearly defined resources (e.g., funding, space, staff) to benefit the network; (c) past and current activities in participating in planning and implementing the Telehealth project; and, (d) the originating site's resource contribution, and decisions on equipment placement and responsibility for maintenance throughout the funding period and beyond. All Memorandum of Agreements must be dated and contain original signatures from the authorized representatives. MOAs containing generic information not referencing and

relevant to the proposed telehealth network grant project, are not acceptable. In addition, documents that confirm actual or pending contractual agreements should clearly describe the roles of the subcontractors and any deliverables.

Note: Evidence must be provided that all network partners, including health and human/social service organizations, are committed to the project and are ready to implement the project on September 1, 2016, for Year 1. Signed Memorandum of Agreements (MOA) from those network partners committed to the proposed project must be included in the application. Applicants failing to submit verifiable information with respect to the commitment of network partners, including specific roles, responsibilities, and services being provided, will be deemed incomplete and will not be considered for funding.

Attachment 6: Position Descriptions for Key Personnel.

Each position description should not exceed one page in length. For each key person assigned to the project, including key personnel at all network member sites, provide position descriptions (PDs) and those involved in data collection and analysis. The PDs should indicate the role(s) and responsibilities of each key individual in the project. If persons will be hired to fill positions, provide position descriptions that give the title of the position, duties and responsibilities, required qualifications, supervisory relationships, and salary ranges.

Attachment 7: Biographical Sketches of Key Personnel.

Keep each bio to one page in length if possible. For each key person assigned to the project, including key personnel at all network member sites, provide biographical sketches. Highlight the qualifications (including education and past experience) that each person has to carry out his/her respective role. In the event that a biographical sketch is included for an identified individual who is not yet hired, please include a letter of commitment from that person with the biographical sketch. DO NOT SUBMIT FULL CURRICULUM VITAE.

Attachment 8: Project Organizational Chart

Provide a one-page figure that depicts the organizational structure of the project, including subcontractors and other significant collaborators. The organizational chart should illustrate where project staff are located and reporting lines for each component of the project. The relationship between all partners/network members/sub-contractors on the project (if any) and the applicant should be shown. The application should designate a project director, employed by applicant organization, who has day-to-day responsibility for the technical, administrative, and financial aspects of the project and a principal investigator, who has overall responsibility for the project and who may be the same as the project director.

Attachment 9: Letters of Support

Include only letters of support which specifically indicate a commitment to the project/program (in-kind services, dollars, staff, space, equipment, etc.). List all other support letters on one page.

Attachment 10: Request for Funding Preference
To receive a funding preference, include a statement that the applicant is eligible for a funding preference and identify the preference. Include documentation of this qualification. See Section V.2.

Attachment 11: Proof of Non-profit Status
The applicant must include a letter from the IRS or eligible State entity that provides documentation of profit status. This may either be: 1) a reference to the applicant organization's listing in the most recent IRS list of tax-exempt organizations, as described in section 501(c)(3) of the IRS Code; 2) a copy of a current and valid IRS tax exemption certificate; 3) a statement from a State taxing body, State Attorney General, or other appropriate State official certifying that the applicant organization has a nonprofit tax status and that none of the net earnings accrue to any private shareholders or individuals; 4) a certified copy of the applicant organization's certificate of incorporation or similar document if it clearly establishes the nonprofit status of the organization; or 5) any of the above documents from a State or national parent organization with a statement signed by that parent organization affirming that the applicant organization is a local nonprofit affiliate. In place of the letter documenting nonprofit status, public entities may indicate their type of public entity (State or local government) and include it here.

Attachment 12: Indirect Cost Rate Agreement (if applicable)
For this program, indirect costs are limited to 15% of the total grant funds and must apply to the activities funded under this program [Public Health Service Act Section 330I(l)(7)].

Attachment 13: Other documents, as necessary (i.e. Maps)
Please include any other documents (not provided for elsewhere in this Table of Contents) that you chose to submit, as necessary. Be sure the attachment is clearly labeled.

3. Dun and Bradstreet Universal Numbering System Number and System for Award Management

Applicant organizations must obtain a valid DUNS number and provide that number in their application. Each applicant must also register with the System for Award Management (SAM) and continue to maintain active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by an agency (unless the applicant is an individual or federal agency that is exempted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the agency under 2 CFR 25.110(d)).

HRSA may not make an award to an applicant until the applicant has complied with all applicable DUNS and SAM requirements and, if an applicant has not fully complied with the requirements by the time HRSA is ready to make an award, HRSA may determine that the applicant is not qualified to receive an award and use that determination as the basis for making an award to another applicant.

If an applicant/recipient organization has already completed Grants.gov registration for HRSA or another federal agency, confirm that the registration is still active and that the Authorized Organization Representative (AOR) has been approved.

The Grants.gov registration process requires information in three separate systems:

- Dun and Bradstreet (http://fedgov.dnb.com/webform/pages/CCRSearch.jsp)
- System for Award Management (SAM) (https://www.sam.gov)
- Grants.gov (http://www.grants.gov/)

For further details, see Section 3.1 of HRSA's *SF-424 Application Guide*.

Applicants that fail to allow ample time to complete registration with SAM or Grants.gov will not be eligible for a deadline extension or waiver of the electronic submission requirement.

4. Submission Dates and Times

Application Due Date
The due date for applications under this funding opportunity announcement is April 8, 2016 at 11:59 P.M. Eastern Time.

See Section 8.2.5 – Summary of e-mails from Grants.gov of HRSA's *SF-424 Application Guide* for additional information.

4. Intergovernmental Review

The Telehealth Network Grant Program is a program subject to the provisions of Executive Order 12372, as implemented by 45 CFR 100. See Executive Order 12372 in the HHS Grants Policy Statement.

It is the applicant's responsibility to identify what is needed to be done within their state's intergovernmental review process. See Section 4.1 ii of HRSA's SF-424 Application Guide for additional information.

See Section 4.1 ii of HRSA's *SF-424 Application Guide* for additional information.

5. Funding Restrictions

Applicants responding to this announcement may request funding for a project period of up to four (4) years, at no more than $300,000 per year. Awards to support projects beyond the first budget year will be contingent upon Congressional appropriation, satisfactory progress in meeting the project's objectives, and a determination that continued funding would be in the best interest of the Federal Government.

Funds under this announcement may not be used for the following purposes:

1) to acquire real property;
2) for expenditures to purchase or lease equipment, to the extent that the expenditures would exceed 40 percent of the total grant funds;
3) in the case of a project involving a telehealth network, to purchase or install transmission equipment (such as laying cable or telephone lines, or purchasing or installing microwave towers, satellite dishes, amplifiers, or digital switching equipment);
4) to pay for any equipment or transmission costs not directly related to the purposes for which the grant is awarded;

5) to purchase or install general purpose voice telephone systems;
6) for construction; or
7) for expenditures for indirect costs, to the extent that the expenditures would exceed 15 percent of the total grant funds.

The General Provisions in Division H, of the Consolidated Appropriations Act, 2016 (P.L. 114-113), apply to this program. Please see Section 4.1 of HRSA's SF-424 Application Guide for additional information. Note that these or other restrictions will apply in FY 2016, as required by law.

All program income generated as a result of awarded grant funds must be used for approved project-related activities.

V. Application Review Information

1. Review Criteria

Procedures for assessing the technical merit of applications have been instituted to provide for an objective review of applications and to assist the applicant in understanding the standards against which each application will be judged. Critical indicators have been developed for each review criterion to assist the applicant in presenting pertinent information related to that criterion and to provide the reviewer with a standard for evaluation. Review criteria are outlined below with specific detail and scoring points.

These criteria are the basis upon which the reviewers will evaluate the application. The entire proposal will be considered during objective review.

Review Criteria are used to review and rank applications. The TNGP has seven (7) review criteria:

Criterion 1: NEED (20 points)—Corresponds to Section V's Introduction and Needs Assessment

The application will be evaluated based on the extent to which the applicant has:

1. Clearly identified the rural areas and specific SBHCs (where applicable) to be served by this project, using county and sub-county level data.
2. Described the target population and its unmet health needs, specifically describing the lack of access to health care experienced by children and adolescents (if applicable). Describe the socio-economic challenges of the service area including burden of poverty, etc.
3. Utilized appropriate data sources (e.g., local, State, Federal) to substantiate the need for the project, including providing quantifiable information on the lack of existing health care services/programs available in the applicant's target area. The Federal Medical Assistance Percentages will also be considered as a proxy for lack of community financial resources to implement telehealth services without a network grant.

Criterion 2: RESPONSE (20 points)—Corresponds to Section IV's Needs Assessment and Methodology

The application will be evaluated based on the extent to which the application responds to the "Methodology" and "Needs Assessment" sections to address the project's goals and objectives. **This Criterion is comprised of two parts: a. Goals and Objectives (maximum 10 out of 20 points); and b. Benefits (maximum 10 out of 20 points)**

a. Goals and Objectives (maximum 10 out of 20 points) – The extent to which the application proposes project goals and objectives that: relate to identified community needs, market demand and the TNGP; are consistent with the rationale for the proposed project; are measurable, outcome-oriented, time-limited, and achievable; and, are consistent with the applicant organization's mission.

The application will be evaluated based on the extent to which the project Goals and Objectives describe:

1. The adequacy of the applicant's strategy to address the health care needs of the target population living in rural areas through telehealth networks including SBHCs (where applicable).
2. The evidence base or a promising practice cited to support their planned project.
3. The alignment of the project's proposed health care services and SBHCs (where applicable) to the demand of the target community (ies) and, as appropriate, neighboring communities, considering existing use and referral patterns.

b. Benefits (maximum 10 out of 20 points) - The extent to which the application proposes: quantifiable benefits of the clinical services being delivered by the project through the use of telehealth technologies being used, and how the benefits relate to the mission of the applicant and the needs of the community; the actual community demand for the services to be provided; and the extent to which the chosen technology is the optimum solution that justifies the costs (both equipment and human) of its deployment.

The application will be evaluated based on:

1. The extent to which the application proposes quantifiable benefits of the clinical services being delivered by the project, and how the benefits relate to the mission of the applicant and the needs of the community.
2. The extent to which the proposed technology is medically effective and cost-effective way to address the identified health problem(s) including conditions such as asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health.
3. The extent to which the applicant demonstrates knowledge of technological and human resources in the community and how the proposed projected infrastructure can be supported.

Criterion 3: EVALUATIVE MEASURES (5 points)— Corresponds to Section IV's Resolution of Challenges and Evaluation and Technical Support Capacity

1. The appropriateness of the plan for completing a program assessment and the effectiveness of the methods proposed to monitor and assess the project results.
2. The extent to which the specific goals and objectives to be achieved by the applicant can be measured.

3. The extent to which the applicant describes obstacles and solutions to implementing the program assessment.

Criterion 4: IMPACT (20 points) - Corresponds to Section IV's Methodology, Work Plan, Resolution of Challenges, and Organization Information

The application will be evaluated based on the clarity with which the application identifies how the health status of target population will be improved as a result of the activities conducted by the telehealth network. Specifically, this criterion will be evaluated based on two parts:

a. Sustainability (maximum 10 out of 20 points)

The extent to which the application documents how the project will be sustained during and after the period of federal grant funding as evidenced by: financial and other commitment of the applicant and project partners to the project; community involvement and support in formulating and sustaining the network; network management, including integration of the project into the long-term strategic plans of the participating institutions; operational project management; marketing and community education and outreach activities to build support; and financial and business planning (analyses of: project costs and benefits, revenues and expenses, tangible and intangible, benefits, etc.).

The application will be evaluated based on the extent to which the applicant and the Network Partners:

1. Satisfactorily documented the community's willingness and ability to support the network's solution and SBHCs (where applicable).
2. Demonstrates knowledge regarding reimbursement for services provided via telehealth technologies to the target population, in the state(s) identified.
3. Has a potential for non-grant reimbursement of telehealth services provided by the network.
4. If non-grant reimbursement is unavailable, has a plan for clinician reimbursement not exceeding the $90 per session/encounter limit.
5. Will integrate existing clinical resources to serve the health care needs of the target population.
6. Outlines a realistic plan for sustainability after federal support ends, taking into consideration challenges and barriers that will be encountered.

b. Project Impact and Information Dissemination (maximum 10 out of 20 points)

The application will be evaluated based on the extent to which the applicant documents:

1. Extent to which the applicants demonstrate the strength of their approach and success in serving the target population.
2. Satisfactorily describes the projected number of patients that will be served through the proposed telehealth network grant project each year, and provides rationale for any changes in projected numbers from year to year.
3. Preparation to report on specific performance measures including process, clinical and outcome measures.

Criterion 5: RESOURCES/CAPABILITIES (15 points)—Corresponds to Section IV's Workplan, Resolution of Challenges, Evaluation and Technical Support Capacity, and Organizational Information

The application will be evaluated based on the extent to which project personnel are qualified by training and/or experience to implement and carry out the projects. Additionally, the application will address the capabilities of the applicant organization and quality and availability of facilities and personnel to fulfill the needs and requirements of the proposed project.

This Criterion is comprised of two parts:

a. Network Experience/ Network Member Sites including, as applicable, Network Partner Rural Spoke sites and Hub site(s) and Network Organization (maximum 7 out of 15 points)
b. Clinician Acceptance and Support (maximum 8 out of 15 points)

a. Network Experience/ Network Member Sites including, as applicable, Network Partner Rural Spoke sites and Hub site(s) and Network Organization (maximum 7 out of 15 points)

1. The quality of the technical and organizational ability to implement the proposed project, including the size of the network, governance structure of the project, and involvement of network members, in the project.
2. Extent to which the network has conducted previous activities that have had an impact on improving the health and well-being of the rural population through telehealth technologies.

b. Clinician Acceptance and Support (maximum 8 out of 15 points)

1. The extent to which the applicant provides evidence to support the work plan that shows it will be ready to begin to implement the project upon grant award.
2. The extent of commitment, involvement and support of senior management and clinicians in developing and operating the project; clinicians' understanding of the challenges in project implementation and their competence and willingness to meet those challenges; the commitment of resources for training staff and technical support to operate and maintain the system; and, the extent to which the technology is integrated into clinician practice.
3. Appropriateness of the responsible individual(s) and organization(s) and a timeline for each activity for all four years.

Criterion 6: SUPPORT REQUESTED (10 points) – Corresponds to Section IV's Methodology, Workplan, Resolution of Challenges, Evaluation and Technical Support Capacity, and Organizational Information

The application will be evaluated based on the extent to which the budget, including the cost projections, and budget justification:

1. Is realistic and justified in terms of the project goal(s), objectives, and proposed activities, and the budgeted costs are necessary, and justifiable to implement and maintain the project, including the human and technical infrastructure.
2. Documents a realistic, necessary, and justifiable full-time equivalents (FTEs) and expertise necessary to implement and maintain the project.

3. Is complete and detailed in supporting each line item and allocating resources for each year of the project period.
4. Documents experience with regard to technical costs of hardware and software, and telecommunication charges, describing appropriate costs of deploying technology and operating the project on an ongoing basis.
5. Describes cost savings expected through the Universal Service Rural Health Care Program (see http://www.universalservice.org/rhc/).

Criterion 7: ASSESSING TECHNOLOGY AND INTEGRATING ADMINISTRATIVE AND CLINICAL SYSTEMS (10 points) – Corresponds to Section IV's Methodology, Resolution of Challenges, and Organizational Information.

The application will be evaluated on the extent to which the applicant and network members demonstrate knowledge of technical requirements and rationale for cost-effective deployment and operation including:

1. The ability to integrate administrative and clinical information systems within the proposed telehealth network through technologies that are upgradeable and scalable.
2. Justifying the technology as the optimum and most efficient technology to meet the identified need.
3. Explaining how the project will ensure the privacy of patients and clinicians using the system and the confidentiality of information transmitted via the system, including compliance with Federal and State privacy and confidentiality, including HIPAA regulations.
4. Describing knowledge of telecommunications transmission services available in the project service area, and justify the deployment at each site considering the range of choices available.
5. Describing the ability to integrate administrative and clinical information systems with the proposed telehealth system and school-based health center network partners.

2. Review and Selection Process

Please see Section 5.3 of HRSA's *SF-424 Application Guide*.

Funding Preferences

This program provides a funding preference for some applicants as authorized by Section 330I(i) of the Public Health Service Act. Applicants receiving the preference will be placed in a more competitive position among applications that can be funded. Applications that do not receive a funding preference will be given full and equitable consideration during the review process. The funding preference will be verified by the Objective Review Committee, provided the applicant has requested a funding preference(s) in their application. The law provides that a funding preference be granted to any qualified, Lead Applicant, which specifically requests the preference and meets the criteria for the preference as follows:

Applications that qualify for a funding preference(s) will be funded ahead of other approved applications. ***Preference will be given to an eligible entity that meets at least one (1) of the following requirements:***

(A) ORGANIZATION – the eligible entity is a **rural** community-based organization or another community-based organization.
(B) SERVICES – the eligible entity proposes to use Federal funds made available through such a grant to develop plans for, or to establish, telehealth networks that provide mental health, public health, long-term care, home care, preventive, or case management services.
(C) COORDINATION – the eligible entity demonstrates how the project to be carried out under the grant will be coordinated with other relevant federally funded projects in the areas, communities, and populations to be served through the grant.
(D) NETWORK – the eligible entity demonstrates that the project involves a telehealth network that includes an entity that –
(i) provides clinical health care services, or educational services for health care providers and for patients or their families; and
(ii) is—
(I) a public library;
(II) an institution of higher education; or
(III) a local government entity.
(E) CONNECTIVITY.—the eligible entity proposes a project that promotes local connectivity within areas, communities, and populations to be served through the project.
(F) INTEGRATION.—the eligible entity demonstrates that clinical health care information has been integrated into the project.

Funding Priorities
A funding priority is defined as the favorable adjustment of review scores when applications meet specified criteria. **Applicants do not need to request funding priorities.** Prior to final funding decisions, HRSA will assess all TNGP applications within the fundable range for eligibility to receive priority point adjustment(s). Applications are eligible to receive fifteen priority points if the following conditions are met:

- ***The network includes School-Based Health Centers (5 points)*:** As defined by the Children's Health Insurance Reauthorization Act of 2009 (Section 2110(c) (42 U.S.C. 1397jj), a 'school-based health center' means a health clinic that— ''(i) is located in or near a school facility of a school district or board or of an Indian tribe or tribal organization; (ii) is organized through school, community, and health provider relationships; (iii) is administered by a sponsoring facility; (iv) provides through health professionals primary health services to children in accordance with State and local law, including laws relating to licensure and certification; and (v) satisfies such other requirements as a State may establish for the operation of such a clinic. The term 'sponsoring facility' includes any of the following: (i) A hospital. (ii) A public health department. (iii) A community health center. (iv) A nonprofit health care agency. (v) A school or school system. (vi) A program administered by the Indian Health Service or the Bureau of Indian Affairs or operated by an Indian tribe or a tribal organization.''
- ***The proposed telehealth network project includes three or more rural SBHC originating sites (5 points).***

- ***The proposed telehealth network plans to address delivery of all of the clinical services for SBHC's specified in the purpose section of this funding opportunity announcement: asthma, obesity reduction and prevention, behavioral health, diabetes, and oral health (5 points)***

3. Assessment of Risk

The Health Resources and Services Administration may elect not to fund applicants with management or financial instability that directly relates to the organization's ability to implement statutory, regulatory or other requirements (45 CFR § 75.205).

Effective January 1, 2016, HRSA is required to review and consider any information about the applicant that is in the Federal Awardee Performance and Integrity Information System (FAPIIS). An applicant may review and comment on any information about itself that a federal awarding agency previously entered. HRSA will consider any comments by the applicant, in addition to other information in FAPIIS in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 45 CFR § 75.205 Federal Awarding Agency Review of Risk Posed by Applicants.

A determination that an applicant is not qualified will be reported by HRSA to FAPIIS.

The decision not to make an award or to make an award at a particular funding level, is discretionary and is not subject to appeal to any HHS Operating Division or HHS official or board.

4. Anticipated Announcement and Award Dates

It is anticipated that awards will be announced prior to the start date of September 1, 2016.

VI. Award Administration Information

1. Award Notices

The Notice of Award will be sent prior to the start date of September 1, 2016. See Section 5.4 of HRSA's *SF-424 Application Guide* for additional information.

2. Administrative and National Policy Requirements

See Section 2 of HRSA's *SF-424 Application Guide*.

3. Reporting

The successful applicant under this funding opportunity announcement must comply with Section 6 of HRSA's *SF-424 Application Guide* **and** the following reporting and review activities:

1) **Progress Report**(s). The recipient must submit a progress report to HRSA on an **annual** basis. Further information will be provided in the award notice.

2) **Performance Measures:** Upon award, recipients will be required to report on specific performance measures, such as:
   a. Types of telehealth network partner settings.
   b. The number of encounters by specialty/service, by patient care setting (network facility), and by type of telemedicine encounter.
   c. Third party and grant reimbursement received for the encounters.
   d. New services available in rural areas due to the grant.
   e. Patient and practitioner travel miles saved by each network facility.
   f. Number of Practitioner Referrals at each network facility.

   Additional information on performance measure reporting will be made available to recipients after September 1, 2016.

3) **Final Report:** A final report is due within 90 days after the project period ends. The final report will collect information such as program-specific goals and progress on strategies; core performance measurement data; impact of the overall project; the degree to which the recipient achieved the mission, goal and strategies outlined in the program; recipient objectives and accomplishments; barriers encountered; and responses to summary questions regarding the recipient's overall experiences over the entire project period. The final report must be submitted on-line by recipients in the Electronic Handbooks system at https://grants.hrsa.gov/webexternal/home.asp. Further information will be provided upon receipt of reward.

4) **OAT Recipient Directory:** Applicants accepting this award must provide information for OAT's Recipient Directory Profiles. Further instructions will be provided by OAT. The current Telehealth directory is available online at: http://www.hrsa.gov/telehealth.

5) **Final Sustainability Plan:** As part of receiving the grant, recipients are required to submit a final Sustainability Plan by month three of the fourth year of their grant period. This sustainability plan will be different and more robust in comparison to the plan submitted with the original application. Further information will be provided upon receipt of the award.

6) **Final Assessment Plan**. Recipients are required to submit a final assessment plan detailing the strategy for assessing performance measures (implementation and operations) to determine program effectiveness so that adjustments, as needed, can be made. Further information will be provided upon receipt of the award.

7) **Integrity and Performance Reporting.** The Notice of Award will contain a provision for integrity and performance reporting in FAPIIS, as required in 2 CFR 200 Appendix XII.

VII. Agency Contacts

Applicants may obtain additional information regarding business, administrative, or fiscal issues related to this grant announcement by contacting:

Sola Dada, MHA
Grants Management Specialist
Attn.: RCP-TNGP
HRSA Division of Grants Management Operations, OFAM
5600 Fishers Lane, Room MS 10NWH04
Rockville, MD 20857
Telephone: (301) 443-0195
Email: Odada@hrsa.gov

Additional information related to the overall program issues and/or technical assistance regarding this funding announcement may be obtained by contacting:

Carlos Mena
Public Health Analyst
Office for the Advancement of Telehealth
ATTN: TNGP
Federal Office of Rural Health Policy, HRSA
5600 Fishers Lane
Room 17W49B
Rockville, MD 20857
Telephone: (301) 443-3198
Fax: (301) 443-1330
Email: cmena@hrsa.gov

Applicants may need assistance when working online to submit their application forms electronically. Applicants should always obtain a case number when calling for support. For assistance with submitting the application in Grants.gov, contact Grants.gov 24 hours a day, seven days a week, excluding Federal holidays at:

Grants.gov Contact Center
Telephone: 1-800-518-4726 (International Callers, please dial 606-545-5035)
E-mail: support@grants.gov
iPortal: https://grants-portal.psc.gov/Welcome.aspx?pt=Grants

Successful applicants may need assistance when working online to submit information and reports electronically through HRSA's Electronic Handbooks (EHBs). For assistance with submitting information in HRSA's EHBs, contact the HRSA Call Center, Monday-Friday, 8:00 a.m. to 8:00 p.m. ET:

HRSA Contact Center
Telephone: (877) 464-4772
TTY: (877) 897-9910
Web: http://www.hrsa.gov/about/contact/ehbhelp.aspx

VIII. Other Information

1. Common Definitions

For the purposes of this Telehealth Network Grant Program, the following definitions apply:

Budget Period – the interval of time into which the project period is divided for budgetary and reporting purposes. For this grant program, the time interval is 12 months.

Community-Based Program – a planned, coordinated, ongoing effort operated by a community that characteristically includes multiple interventions intended to improve the health status of the members of the community.

Community Health Centers (CHCs) – See "Health Centers."

Existing Network vs. New Network – An *existing network* is a network in which individual members are currently providing and/or receiving telehealth/telemedicine services. Under this grant program, an existing network that proposes to add new network members/sites is still considered an existing network. A *new network* is one in which the individual sites are not currently collaborating to provide telehealth/telemedicine services, but intend to do so as part of the proposed network.

Federally Qualified Health Centers – Federally and non-Federally-funded health centers that have status as Federally-qualified health centers under Section 1861(aa)(4) or Section 1905(l)(2)(B) of the Social Security Act (42 U.S.C. 1395x(aa)(4) and 1396(l)(2)(B), respectively).

Health Centers – Health Centers refer to all the diverse public and non-profit organizations and programs that receive Federal funding under Section 330 of the Public Health Service (PHS) Act, as amended by the Health Centers Consolidation Act of 1996 (P.L. 104-299) and the Health Care Safety Net Amendments of 2002 (P.L. 107-251). They include Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, and Primary Care Public Housing Health Centers.

Interoperability/Open Architecture – the condition achieved among telecommunication and information systems when information (i.e., data, voice, image, audio, video) can be easily and cost-effectively shared across acquisition, transmission, and presentation technologies, equipment and services. It is facilitated by using industry standards rather than proprietary standards.

Poverty – The U.S. Department of Agriculture officially defines it as having an income below a federally determined poverty threshold.

Project Period – The total time for which federal support of a discretionary project has been approved. A project period may consist of one or more budget periods. For this grant program, the project period will generally consist of four (4) budget periods.

Rural – All counties that are not designated as parts of Metropolitan Areas (MAs) by the Office of Management and Budget (OMB) are considered rural. 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.

School-Based Health Center (SBHC) – As defined by the Children's Health Insurance Reauthorization Act of 2009 (Section 2110(c) (42 U.S.C. 1397jj), a 'school-based health center' means a health clinic that— ''(i) is located in or near a school facility of a school district or board or of an Indian tribe or tribal organization; (ii) is organized through school, community, and health provider relationships; (iii) is administered by a sponsoring facility; (iv) provides through health professionals primary health services to children in accordance with State and local law, including laws relating to licensure and certification; and (v) satisfies such other requirements as a State may establish for the operation of such a clinic. The term 'sponsoring facility' includes any of the following: (i) a hospital; (ii) a public health department; (iii) a community health center; (iv) a nonprofit health care agency; (v) a local educational agency; (vi) a program administered by the Indian Health Service or the Bureau of Indian Affairs or operated by an Indian tribe or a tribal organization.''

Telehealth – The use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration.

Telemedicine – The use of electronic communication and information technologies to provide or support clinical care at a distance. Included in this definition are patient counseling, case management, and supervision/preceptorship of rural medical residents and health professions students when such supervising/precepting involves direct patient care. The term "telemedicine" also includes clinical activities such as mHealth, telehomecare, remote monitoring, e-health, tele-ICUs.

Telemedicine Session/Encounter – An interaction relating to the clinical condition or treatment of a patient utilizing telemedicine technologies over distance. It is the process by which a clinical service is delivered. The session may be interactive (i.e. in real-time) or asynchronous (i.e. using store-and-forward technology). Examples of sessions include, but are not limited to the following: an interaction between two practitioners, with or without the patient present, regarding the diagnosis and/or treatment of the patient; an interaction between a specialty practitioner and a patient; a session involving two interdisciplinary health care teams with or without the patient and patient's family present; a session between a home care health professional and an individual in the home; and an interaction between a practitioner and a student in elementary or high school-based health centers. Professionals from a variety of health care disciplines may be involved in requesting and/or providing telemedicine sessions/encounters including, but not limited to: physicians, physician assistants, dentists, dental hygienists, nurses, nurse practitioners, nurse-midwives, clinical nurse specialists, physical therapists, occupational therapists, speech therapists, clinical psychologists, clinical social workers, substance abuse counselors, podiatrists, optometrists, dieticians/nutritionists, pharmacists, optometrists, EMTs, etc.

IX. Tips for Writing a Strong Application

See Section 4.7 of HRSA's *SF-424 Application Guide*.

APPENDIX 3
GRANT REVIEWERS FORM

Grant Reviewer Comments Form

Grant Reviewer:________________________________

Date:________________________________

Reviewer 1 comments:

Comment 1

Response to comment 1

Comment 2

Response to comment 2

Reviewer 2 comments:

Comment 1

Response to comment 1

Comment 2

Response to comment 2

Reviewer 3 comments:

Comment 1

Response to comment 1

Comment 2

Response to comment 2

Reviewer 4 comments:

Comment 1

Response to comment 1

Comment 2

Response to comment 2

Reviewer 5 comments:

Comment 1

Response to comment 1

Comment 2

Response to comment 2

APPENDIX 4
HIPAA AND TELEHEALTH COMPLIANCE GUIDE

HIPAA & Telehealth

A Stepwise Guide to Compliance

Should I Be Concerned?

STEP 1

DOES HIPAA APPLY TO ME AND MY TELEHEALTH PRACTICE? HIPAA applies to you if you are a healthcare provider that transmits personal health information (PHI) in electronic form. If you do, you ARE a covered entity (CE).

STEP 2

IS THE INFORMATION I AM TRANSMITTING CONSIDERED PHI? Anything that can be used to identify an individual is potentially PHI. There are 18 types of identifiers considered PHI. Examples related to telehealth include names, phone numbers, birthdates, IP addresses, email addresses, device identifiers, and photos/images.

STEP 3

DO I HAVE BUSINESS ASSOCIATES? A business associate is anyone who creates, receives, maintains or transmits PHI on your behalf; or has the ability to come in contact with PHI in your practice. See PHI examples above.

OK, NOW I'M WORRIED! Keep Reading To Find Out What You Can Do!

Did You Know?

#1 If you are sharing any type of PHI with Business Associates, any mistakes they make in protecting the security and privacy of your data are yours too. YOU are still responsible.

#2 Your compliance is now dependent on their practices.

#3 You can protect yourself by having formal Business Associates Agreements (BAAs) documenting how they are protecting your PHI and by performing reasonable due diligence to verify their security practices.

Do not disclose PHI to any Business Associate unwilling to sign a BAA.

Complying With HIPAA

HIPAA compliance is a combination of physical, administrative and technical safeguards. Technology alone cannot be HIPAA compliant or make you HIPAA compliant. Here are the things you and your Business Associate(s) should do and document:

RISK ASSESSMENT: Conduct a comprehensive review of where you store or access PHI and how secure it is in each case. Take appropriate steps to secure it in a way that fits for your organization. Establish and document your security policies and procedures. Train your employees regularly and consistently.

INFORMATION SYSTEMS ACTIVITY REVIEW: Conduct and document periodic reviews of access logs or other records for unauthorized activity. It might be bad news if you find some, but YOU want to be the first one to find it. Report the breach and implement a fix immediately. Confer with counsel about what to do next.

You might also want to consider ways to configure your system so that PHI is not stored or shared.

4 Questions to Ask a Potential Business Associate

...but they all say they are HIPAA compliant...

Question 1:

Which of the 18 identifiers of PHI would your company be CAPABLE of accessing?

Question 2:

May I view the results of your last HIPAA compliance audit?

Question 3:

What administrative, physical and technical safeguards do you have in place?

Question 4:

Would you be willing to sign OUR BAA?

Compare these measures among vendors!

Encryption alone is not compliance, and processes that are compliant in a clinic-to-clinic encounter may not be compliant in a clinic-to-consumer encounter. Context matters.

Things to Keep In Mind WHEN (not IF) You Have a Breach...

What Is At Stake?

UNKNOWING VIOLATIONS
"But I Didn't Know"

$50,000 maximum per violation

$100 minimum per violation

Dollars

STAY CALM

First time infringement corrected within 30 days may avoid penalties

Financial Penalties

WILLFUL NEGLECT VIOLATIONS
"But You Did Know*"

Corrected in required time period < Uncorrected

$10,000+ per violation - **$50,000+ per violation**

*Requires only knowledge of the actions that constitute an offense. Specific knowledge that a particular action violates the HIPAA statute is not required.

Fines + Criminal + Civil Penalties

The Maximum Penalty is $1.5 Million Per Year Per Violation

Learn More About HIPAA

* HHS Office for Civil Rights
* Center for Connected Health Policy
* Electronic Code of Federal Regulations
* HIPAA.com
* UMTRC HIPAA Clarifications
* NIST HIPAA Security Rule Toolkit
* American Medical Association and HIPAA

Have questions? Contact a Telehealth Resource Center!

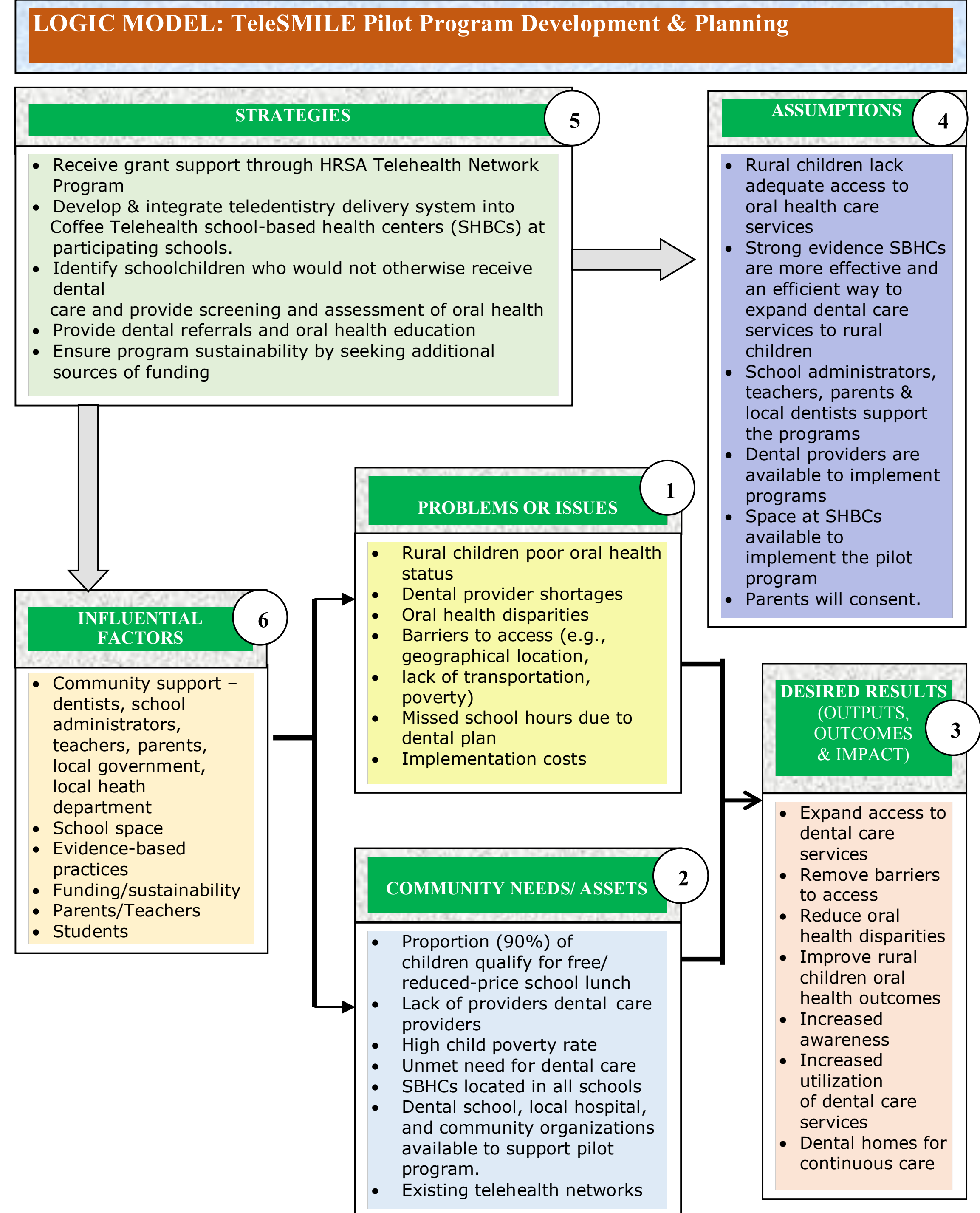
Disclaimer: This document contains general information solely for the purpose of education. The information herein is not intended to and does not constitute legal advice, nor is it complete, and should not be treated as such. If you have specific questions about any legal matter, you should seek legal counsel. Additional privacy and security requirements may also exist based on jurisdiction (e.g., state law) and type of practice (e.g., behavioral health, school health)

TRC activity is supported by grants from the Office for the Advancement of Telehealth, Federal Office of Rural Health Policy, Health Resources and Services Administration, DHHS

TelehealthResourceCenter.org

Version 1.0 4.24.15

APPENDIX 5
TELESMILE PILOT PROGRAM PLANNING LOGIC MODEL



Source: Logic Model Development Guide, W.K. Kellogg Foundation