



South Carolina Center for **Rural and Primary Healthcare**



UNIVERSITY OF
SOUTH CAROLINA
School of Medicine

South Carolina Center for **Rural and Primary Healthcare**

Mission

Support and develop rural and primary care education, delivery, and sustainability in South Carolina through clinical practice, training and research.

Vision

All South Carolinians will have access to high quality and high value healthcare regardless of where they live.

Core Objectives

- Provide programs supporting rural and underserved healthcare providers through enhancing quality clinical care, practice support and professional development, and professional satisfaction and retention.
- Develop and/or support programs that improve the diversity and distribution of South Carolina's rural health workforce.
- Facilitate research necessary to inform strategy, investment and health policy related to rural and primary care in South Carolina.
- Support rural and underserved primary health providers in South Carolina by providing and assisting with advancement of programs giving access to specialized services.
- Promote collaboration among state entities involved in rural health issues.
- Develop and support programs to increase and enhance rural health professions and interprofessional education opportunities in South Carolina.

Governance

The Center resides administratively in the University of South Carolina School of Medicine. The Center is directly administered by its designated Director. The Director reports to the Associate Dean for Clinical Affairs and Chief Medical Officer of the University of South Carolina School of Medicine.



South Carolina Center for **Rural and Primary Healthcare**

Advisory Committee

An Advisory Committee supports the Center in its mission by providing consultation to Center leadership to enhance progress on its core objectives and engaging stakeholders in ongoing collaboration on rural health issues. The Advisory Committee is comprised of key stakeholders supporting rural and primary healthcare in South Carolina.

Chair – Graham Adams, PhD, South Carolina Office of Rural Health

David Garr, MD, South Carolina AHEC

Mark Jordan, SC Department of Health and Environmental Control

Lathran Woodard, SC Primary Healthcare Association

Melanie Matney, SC Hospital Association

Richard Boyles, MD, Community Physician Representative

Virginia Berry-White, LMSW, Community Representative

Matthew Bartels, MD, Blue Cross Blue Shield of South Carolina

Greg Barabell, MD, Select Health of South Carolina

Carlos Milanes, Rural Hospital Representative (CEO, Edgefield County Hospital)

Pending Member Responses: University of South Carolina-Greenville SOM, Medical
University of South Carolina, SC Department of Commerce

SC Center for Rural and Primary Healthcare Staff

Director – Charles Carter, MD, FAAFP

Associate Director – Michele Stanek, MS

Associate Director for Research – Kevin Bennett, PhD

Administrative Assistant – Cathy Darby

Associate Dean for Clinical Affairs – William Anderson, MD



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South Carolina Center for Rural and Primary Healthcare

SC House Ways and Means
Healthcare Budget Subcommittee
January 30, 2018

South Carolina Center for
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South Carolina Center for Rural and Primary Healthcare

Established in 2017 at USC School of Medicine

- **Mission**
 - Support and develop rural and primary care education, delivery, and sustainability in South Carolina through clinical practice, training and research.
- **Vision**
 - All South Carolinians will have access to high quality and high value healthcare regardless of where they live.
- **Collaborative partners**
 - SC DHHS, SC Office of Rural Health, SC AHEC, SC educational institutions

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South Carolina Center for Rural and Primary Healthcare

Core Objectives

- Programs supporting rural and underserved healthcare providers
- Programs improving rural health workforce
- Research informing rural health strategy, investment, and policy
- Access to specialized services in rural areas
- Collaborate to address rural health issues
- Programs for rural health professions education

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South Carolina Center for Rural and Primary Healthcare

Statewide Rural Health Initiatives

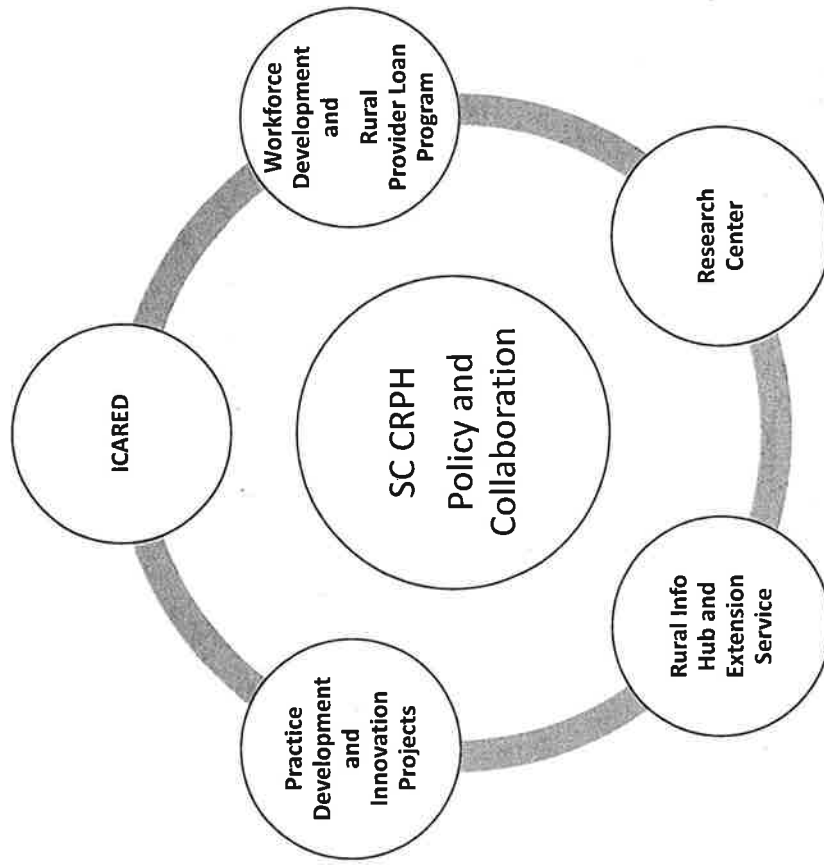
- ICARED Program
- Rural Provider Loan Program
- Collaborative projects and initiatives

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Review of Statewide Rural Health Initiatives



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ICARED

Clinical services to rural communities through primary care and subspecialty “boots on the ground”

- Pediatric subspecialties
- Adult Cardiology
- Psychiatry
- Immunology/Infectious Disease
- Dentistry
- Family Medicine

Impact: Close care gaps, improve access, patients get care in their community

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ICARED

Projects to enhance rural health:

- Food Share
- Ultrasound training for rural providers
- Grants to
 - USC College of Social Work - interprofessional team training in rural practices
 - USC School of Pharmacy – expand rural health teaching models
 - USC School of Nursing – palliative care demonstration project
 - USC School of Public Health – assess changes in SC rural service delivery

Impact: Rural health innovation, health services access, foster project improving rural health

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Recruiting Rural Providers

Statewide Loan Program

- Pilot program at USC School of Medicine
- Statewide program starting this spring for 2018 enrollees
- All state-affiliated health professions schools:
 - MD
 - Nurse Practitioner
 - Physician's Assistant
- Requires one year of practice for each year of support
- Primary care and critical need specialties

Impact: Increase rural healthcare workforce

Collaborative projects

- Developing an electronic learning and collaboration platform for rural providers
- Pharmacy Extension Service
- Behavioral Health Extension Service
- Micro-grant program supporting rural practices
- Research Division
 - Conducting a detailed analysis of rural health resources in SC
 - Leverage into a public use database

Impact: Improved rural practice support, improved rural provider support, improved information to guide strategy and policy

Future Initiatives – 2018-2019

- Expand ICARED through statewide collaboration
 - Pediatric subspecialty
 - Maternal-Fetal Medicine
- Develop a competitive granting process supporting collaborative rural health projects
- Expand Pharmacy and Behavioral extension
- Develop new rural training program

Thank you

We welcome any questions

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Rural Healthcare Initiatives 2018-2019

Introduction

The University Of South Carolina School Of Medicine (USC SOM) mission is improving the health of the people of South Carolina through medical education, research and health care delivery. A significant portion of our medical education mission focuses on training primary care physicians. Ideally these physicians will remain in South Carolina and in our state's areas of greatest need.

In 2015 we partnered with the South Carolina Department of Health and Human Services to expand programs training, recruiting and retaining primary care physicians in South Carolina's rural and underserved areas. In 2016 we expanded the ICARED program to serve increasing numbers of rural patients, worked to establish a new residency training site in the rural Midlands, and established a Center of Excellence at USC SOM devoted to rural and primary healthcare. In 2017 we stood up the SC Center for Rural and Primary Healthcare (formerly the Center of Excellence) and initiated the many projects outlined below in addition to continuing past initiatives.

We propose continuing these existing programs and expanding on their success with the goal of improving the health of South Carolinians.

The South Carolina Center for Rural Health and Primary Care

Mission: Support and develop rural and primary care education, delivery, and sustainability in South Carolina through clinical practice, training and research.

In 2016 the USC SOM established a center of excellence devoted to supporting rural medical education and practice excellence in South Carolina. It will develop and support training programs, support continuing education and clinical practice improvement for rural physicians, and support research on rural health issues by both employing and testing best practices developed by the center as well as those utilized in other states.

The Center will guide its efforts and measure outcomes according to the following core objectives:

- Provide programs supporting rural and underserved healthcare providers through enhancing quality clinical care, practice support and professional development, and professional satisfaction and retention.
- Develop and/or support programs that improve the diversity and distribution of South Carolina's rural health workforce.
- Facilitate research necessary to inform strategy, investment and health policy related to rural and primary care in South Carolina.
- Support rural and underserved primary health providers in South Carolina by providing and assisting with advancement of programs giving access to specialized services.

- Promote collaboration among state entities involved in rural health issues.
- Develop and support programs to increase and enhance rural health professions and interprofessional education opportunities in South Carolina.

The Center resides administratively in the USC SOM. The Center is directly administered by its designated Director who reports to the Associate Dean for Clinical Affairs and Chief Medical Officer of the USC SOM. Furthermore, the center is supported in its mission by an Advisory Committee. It will engage stakeholders in ongoing collaboration on rural health issues and provide consultation to Center leadership to enhance its progress on its core objectives. The Advisory committee will have broad representation from key stakeholders supporting rural and primary healthcare in South Carolina including the South Carolina Office of Rural Health, South Carolina AHEC, SC DHEC, SC Primary Healthcare Association as well as state educational institutions and community representatives.

Report on Center Initiatives for 2017:

1) Established Center and staffing

- a. We established the SC Center for Rural and Primary Healthcare and brought on a Director, Associate Director, Research Director and Administrative Assistant.

2) Established Research Division

- a. The Research Division is conducting a detailed analysis of rural health care resources in the State of South Carolina and utilizing existing data to examine disease burdens and health care utilization patterns across the state to examine this interplay of factors in health care delivery and outcomes. Ultimately, this will evolve into an up-to-date data warehouse of public-use data, aggregated and summarized to the local level, to be utilized by providers, policy makers, and educators to alleviate health disparities within the state.
- b. We will quantify each county's need for health care services with specific emphasis on rural locations and their unique access issues. In particular we can identify counties that have an overlap of factors indicating need for additional resources. These so-called "hot-spot" approaches can then be used to target workforce development, training, and placement.
- c. In future years we will track trends in these data to proactively identify areas that are at risk for developing deficit conditions, either due to decline resources or increased in health care needs.
- d. Expansion of research center infrastructure
To continue and expand on research conducted by the SC Center for Rural and Primary Healthcare we propose an additional \$100,000 in funding to support additional graduate assistants and research funding.

3) Establishing the rural practice information hub

- a. This information hub will allow rural clinicians to collaborate, interact, and exchange ideas and best practices. This will also support the Pharmacy extension service and Behavioral extension pilot (see below). Furthermore, we will provide enhanced clinical information and continuing education services to rural practitioners enrolled in the online learning community. Finally, a part-time medical librarian will be hired to support the network, catalogue discussion forums, distribute information from the Center to rural practices, and facilitating information exchange.

4) Rural Practitioner/Staff Development and Practice Enhancement Grants

- a. We are establishing a micro-grant program for rural practices to submit grant requests. Grants can be used for infrastructure (ex. computers) or for physician, practitioner, or staff development. We are collaborating with the SC Office of Rural Health to administer this program.

5) Educational site development

- a. Expand capacity for rural clinical training sites at the USC School of Medicine to increase student and resident interest in rural practice. Develop infrastructure, physician support, and model multidisciplinary practices at rural practice sites in the SC Midlands or Pee Dee region to support resident electives, student rotations, and multidisciplinary health education for students. Expand capacity for rural clinical training sites at the USC School of Medicine to increase student and resident interest in rural practice.

6) Rural Clinical Pharmacy and Behavioral Extension Service

- a. Extension services modeled after agricultural extension services have been proposed as an innovative solution to transforming primary care. Clinical pharmacists are an essential part of an interdisciplinary medical team. We are establishing this program for a rural clinical pharmacy extension service providing access to a clinical pharmacist for each of the four SC AHEC zones. Our initial pilot is underway and we plan to expand this year to practices throughout the state to address challenging pharmacotherapy issues, disseminate important medication safety information, and provide evidence-based recommendations for effective and high value medication use. This service will work through the practice information hub.
- b. In addition, we are piloting a parallel service providing providers with education and peer consultation regarding behavioral health care. This extension product will allow providers to obtain expert opinion on how to best care for behavioral and mental health challenges they encounter clinically.

7) Rural Health Innovation Projects

- a. In prior years the SC Center for Rural and Primary Healthcare and the ICARED project have partnered with health sciences schools to conduct grants focused on rural health innovations and delivery. These have included 1) an FQHC-based palliative care demonstration project with the USC School of Nursing, 2) an educational project with the SC College of Pharmacy that initiated a rural health pharmacy residency, 3) an analysis of practice acquisition in rural areas

and implications for care delivery by the USC Arnold School of Public Health, and 4) an interprofessional team training program to increase training of social work students in rural areas by the SC College of Social Work.

- b. We plan to continue these types of grants and transition them to a competitive granting process. Furthermore, we plan to expand the granting program this year.

8) Medical Student, Advanced Practice Registered Nurse and Physician Assistant Rural Practice Scholarship and Loan Repayment Program

Mission: Administrate a multi-tiered loan repayment program piloted by the USC School of Medicine to all state affiliated health professions schools.

Given that the primary care workforce across South Carolina is inadequate, especially in rural areas, The USC SOM established a pilot demonstration scholarship program in 2016. The SC Center for Rural and Primary Healthcare previously expanded the program to a larger number of applicants to increase the size of the future rural primary care workforce pipeline. This statewide program is being established and we request level funding for 2018.

Scholarship and loan repayment recipients are required to commit to rural South Carolina practice in a primary care specialty (Family Medicine, General Pediatrics, or General Internal Medicine) or other critical need specialty (General Surgery, OB/GYN, Psychiatry) for each year of scholarship funds received.

Geographic areas of South Carolina would be identified (Pee Dee, Low Country, Midlands & Upstate) and students from South Carolina would be given first priority. Other recruiting priorities include rural, underrepresented and/or underprivileged background. Students are eligible to enter the program during either their first year of medical school or prior to graduating medical school. They agree to return to practice in rural areas of South Carolina after residency training as determined by the program (rural needs to be defined with consideration of geographic distribution for scholarships- Midlands, Pee Dee, etc.). Given that training in proximity to rural areas predicts future practice and that Family Medicine training is more dispersed to these areas compared to other specialties, particular emphasis will be on recruiting Family Medicine physicians.

Students from all publicly affiliated South Carolina medical schools (USC- Columbia, Medical University of South Carolina, and USC-Greenville School of Medicine) will be eligible for the program. Three scholarships will be allotted to each institution. Scholarships can be redirected to another institution in the case where there is an interested, eligible student and a scholarship is unclaimed. Four of these scholarships would be designated for underrepresented minority students. In addition to the necessary expansion of the physician workforce in rural areas, there is also a need to support placement of advanced practice clinicians as well. These valuable

providers are essential to establishing the interprofessional teams needed to support rural patient-centered medical homes.

Scholarship recipients will be required to commit to rural South Carolina practice in a primary care specialty (Family Medicine, General Pediatrics, or General Internal Medicine) or other critical need specialty (General Surgery, Obstetrics/Gynecology, Psychiatry) for each year of scholarship or loan repayment funds received.

The SC Center of Rural and Primary Healthcare will administrate the program as specified in Proviso 33.27. The Center will 1) administer parameters for program participation; 2) verify the approved locations for practice; and 3) track and report program outcomes.

Scholarships for incoming medical students	Twelve (12) scholarships @ \$20,000 (tuition) per year for a total scholarship award of \$80,000.	960,000
Loan repayment program for graduating medical students	Twelve (12) loan repayment grants for finishing medical students committing to rural primary care or critical need training with a total award of \$80,000 each.	960,000
APRN or PA loan repayment grants	Fifteen (18) scholarships or loan repayment grants for incoming APRN or PA students committing to rural primary care practice give \$12,000 (tuition) per year for a total scholarship award of \$30,000 each (covering the 27 month educational program). Uncommitted remain funds will be available for the repayment grant program.	540,000
Administrative costs	1) Program administration 2) Program execution costs	49,515 150,000
	Total	2,659,515

IV. The ICARED Program

Clinical services and practice support with a focus on innovative technologies initiated in the ICARED (Improved CARE and provision of Rural access to Eliminate health Disparities) grant would be continued in this grant proposal. Furthermore, we propose expanding the program funding to allow for six additional practice sites.

The ICARED Program supports rural clinical practices through:

a) Onsite Subspecialty Support

Two of our recently initiated rural practices are in Sumter and Orangeburg Counties. This program will provide boots on the ground subspecialists including dentists, pediatric subspecialists, maternal fetal medicine specialists, psychiatry, and adult cardiologists to augment the care being provided in the local community. Expansions for clinical care are planned in addition to the sites which are currently funded through ICARED. Our current sites include Society Hill, Hartsville, Orangeburg, Sumter, Lancaster, Winnsboro, Aiken, and Florence.

b) Community Engagement

The FoodShare Fresh Food Box program which started in Richland County to help patients with type 2 diabetes mellitus improve nutrition by overcoming 3 main hurdles: fresh food access, affordability and nutrition education. Fresh produce will be delivered to participants in Orangeburg and Bamberg counties for \$10 along with 45 minutes of diabetes tele-education designed to improve glycemic control and diabetes self-management. We will continue this project and examine and support expansion of successful interventions.

c) Immunology Center

Staging for patients with hepatitis C disease and clinical advice on treatment will be provided by infectious disease specialists at the USC SOM. Accurate staging and identification of therapy is important to target treatment for hepatitis C which can be curative.

d) Remote Heart Failure Monitoring

A remote heart failure monitoring program will be implemented for patients living in rural counties in Sumter and surrounding counties (Kershaw, Lee, Darlington, Clarendon, Florence, Calhoun, and Williamsburg). A pulmonary artery pressure device will be used to remotely monitor patients with congestive heart failure. Early interventions can be made to avoid hospitalization by medication adjustments directed by the cardiologist.

e) Technical Skills training

The USC Ultrasound Institute provide ultrasound training to rural providers to help them incorporate this important technology into their practices.

Funding for Continuing Ongoing Initiatives

Administrative budget	Office, technical support and administrative assistant salary	85,000
Center Director, Associate Director	Salary and travel expenses for Director and Associate Director	158,181
Research Division	Salary and travel for Research Director, Graduate Assistant funding and research infrastructure	228,451
Rural Practice Information Network	Technology, web hosting and salary support for part-time medical librarian who will maintain network	75,356
Rural Practice Enhancement Grants	Grants for rural practices	50,000
Educational Site Development	Develop rural educational sites for health sciences rotations	100,000
Clinical Pharmacy and Behavioral Extension	Administer pharmacy and behavioral extension service	513,400
Rural Health Innovation Projects	Continue to partner with health sciences schools of innovation projects to enhance rural health	800,000
Rural Provider Scholarship/Loan Program	Improve rural workforce by recruiting medical, nurse practitioner and physician assistant students	2,659,515
ICARED Program		2,259,000
	Total	\$6,928,903

Additional proposed initiative 2018:

In addition to continuation of the above programs, we propose the following additional initiatives for the SC Center for Rural and Primary Healthcare

- 1) Rural residency continuity track – Winnsboro, SC (400,000)
 - a. We propose developing the present Winnsboro rural practice and educational site into a permanent track for one additional Family Medicine resident per year to conduct continuity clinical training. This approach allows for a more rapid development and approval process from residency accrediting bodies and, therefore, more rapid production of physicians likely to practice in rural areas. Initial year one funding will include cost for the additional resident as well as on-site infrastructure development and faculty support to allow for the residents to conduct clinical training.

	Resident Funding	Infrastructure	Total
Year 1	100,000	300,000	400,000
Year 2	200,000	200,000	400,000
Year 3	300,000	200,000	500,000

- 2) Expand ICARED through statewide collaboration (500,000)
 - a. Given the geographic limitations inherent in providing clinical services through the ICARED program, the only way we can expand its reach geographically is to collaborate with other health systems. We plan to expand ICARED through
 - i. Pediatric subspecialties in upstate SC
 - ii. Maternal-Fetal Medicine through statewide collaboration
- 3) Expand Rural Innovation Projects (200,000)
 - a. To allow a larger competitive granting process we plan to expand the rural innovation project program.

Funding Request Summary

Initiative	2018 Funding Request (recurring)
Support for current initiatives:	\$6,928,903
SC Center for Rural and Primary Healthcare <ol style="list-style-type: none"> 1. Center Funding and Initiatives (\$4) 2. Rural Provider Scholarship Loan Program (\$2,659,515) 3. ICARED Program (2,259,000) 	
Additional request to expand current initiatives :	\$1,100,000
<ol style="list-style-type: none"> 1) Expand ICARED through statewide collaboration (500,000) 2) Expand granting process for rural innovation (200,000) 3) Winnsboro rural track expansion (\$400,000 initial) 	
Total	\$8,028,903