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14. ABSTRACT

SE VIEW, its Co-investigators and Administrative Core, has launched Year 1 implementation of 13 community-based research and service outreach programs, designed to reduce health disparities. These efforts are expected to reduce the rejection rate as well as improve the enlistment opportunities and tenure of active duty military personnel. The Administrative Core delivered strategic consultation, infrastructure, and quality process support to ensure proper directional, logistics, financial transactions, regulatory compliance, collaborative exchange, community capacity-building, and execution alignments with all stated goals and objectives. An evaluation planning process, inclusive of an evaluation logic model to identify SE VIEW success objectives, was developed and is being implemented. The 13 community-based research and service outreach programs are actively aligned under three domains. SE VIEW provided 1.) educational programs {e.g. a national conference on health disparities}; 2.) preventative medicine, health and wellness programs {e.g. a health information technology network for rural/community hospitals}; and 3.) community partnerships and outreach programs {e.g. web-based resources for mobile health screening and patient navigation services}. Year 1 programmatic activities, infrastructure, collaborative exchange, evaluation priorities, and ongoing process supports will drive Year 2 advances and serve as foundational for SE VIEW achievement of its stated goals.

15. SUBJECT TERMS
Health Disparities, Cancer, Obesity, Diabetes, Cardiovascular Community

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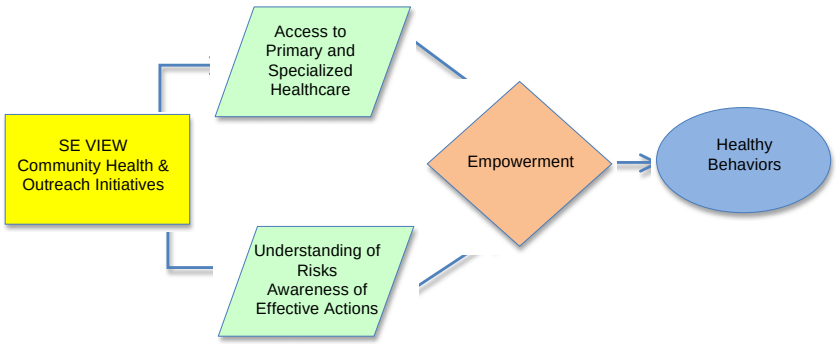
Introduction to SE VIEW

South Carolina and other Southeastern states share a disproportionate burden of chronic diseases, including diabetes, hypertension, various cancers, metabolic syndrome and periodontal disease, which limit opportunities for individuals to enter military service. The rural nature of the region compounds issues of healthcare access and delivery. Racial, ethnic and socioeconomic disparities amplify incidence, prevalence and complications associated with chronic illness. With escalating healthcare costs impacting federal, state and employer budgets, the economic consequences of health disparities represent a key driver for effecting change, improving quality of care for many Americans and ensuring a military-ready population. The Medical University of South Carolina (MUSC) is addressing these burdens through the **Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW)**. The vision of SE VIEW is to develop a nationally recognized, multidisciplinary, inter-professional team of researchers, educators, outreach professionals and laypersons to reduce health disparities. Sabra C. Slaughter, PhD, serves as the Principal Investigator (PI) of SE VIEW and Director of the SE VIEW Administrative Core (SEVAC). Dr. Slaughter and SEVAC provide comprehensive program planning, management, coordination, integration and evaluation. Overall, SE VIEW seeks to:

- Increase awareness of the underlying causes of chronic diseases in the region.
- Develop novel methods to engage communities in the prevention and treatment of chronic diseases.
- Develop community-based services and research initiatives focused on chronic diseases and socioeconomic factors.
- Develop a range of youth-based, active and interactive, electronic modalities to increase the prevention, detection and treatment of chronic diseases.

SE VIEW operates as a model of cooperation to advance collaborative community-based research and service outreach initiatives designed to improve health conditions that preclude enlistment or reduce the functional tenure of military personnel. The flow concept is illustrated in **Fig. 1**.

Figure 1. Conceptual Flow of SE VIEW's Plan to Reduce Health Disparities



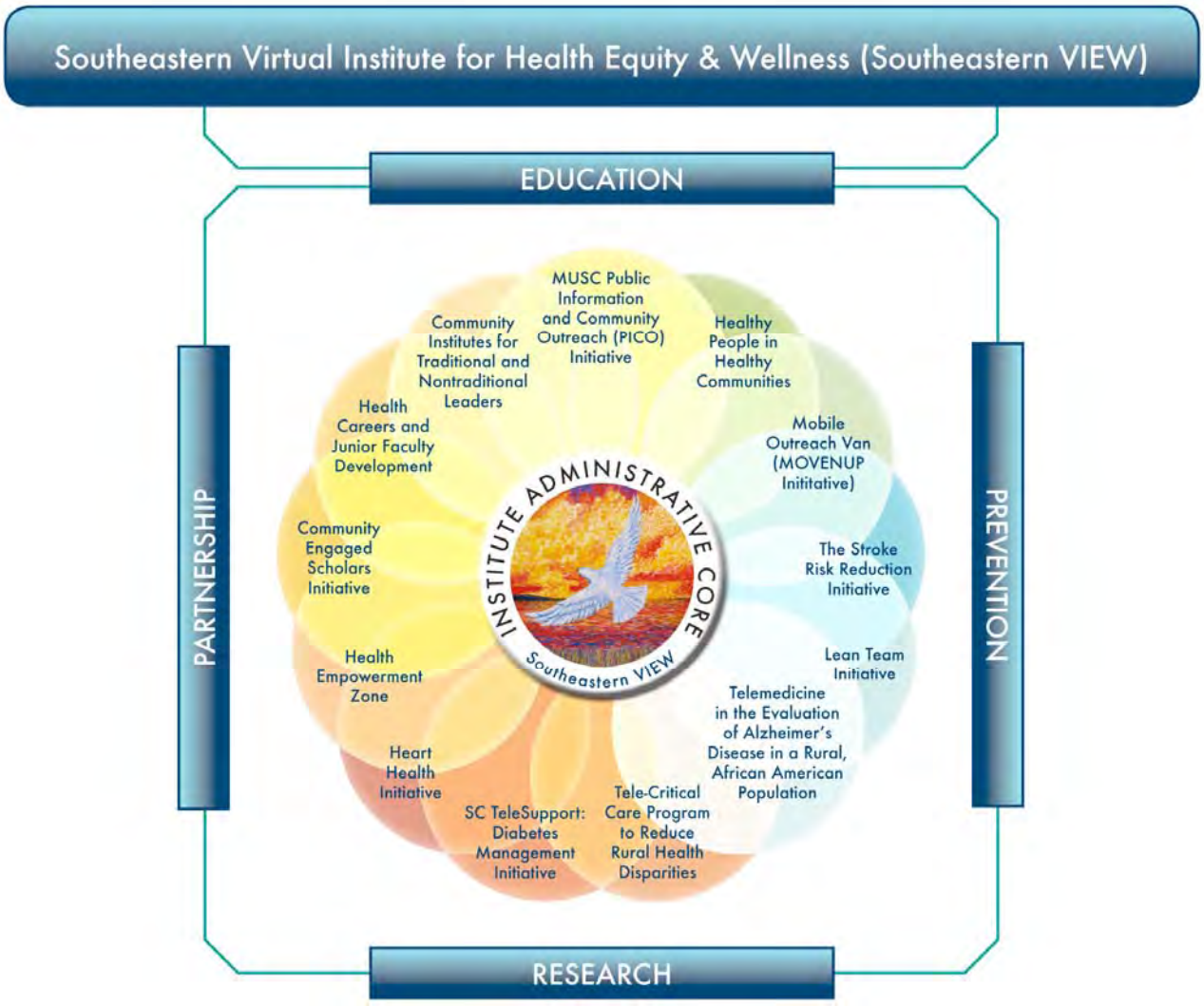
SE VIEW Goals

- GOAL A - Integrate MUSC's model initiatives focused on health disparities into SE VIEW by identifying programmatic synergies and streamlining administrative processes.
    - Objective A1: Establish a single Administrative and Coordinating Core to oversee project logistics, financial transactions, regulatory compliance and bi-directional communications.
    - Objective A2: Establish an Evaluation & Tracking Core to monitor SE VIEW activities and provide timely feedback to the Principal Investigator, Initiative Directors and TATRC to improve program quality.
- GOAL B - Develop strategic partnerships and programs to address the burden of health disparities.
    - Objective B1: Establish an Educational Program to reduce health disparities.
    - Objective B2: Establish a Preventive Medicine, Health and Wellness Program to reduce health disparities.
    - Objective B3: Establish a Community Partnerships and Outreach Program to reduce health disparities.

Body

A total of 13 community-based research and service outreach programs are active. SE VIEW's community-based research and service initiatives are aligned under three program categories addressing **Education (B1), Preventive Medicine, Health and Wellness (B2), and Community Partnerships and Outreach (B3). Fig. 2** illustrates SE VIEW's interative framework.

Figure 2. SE VIEW's Integrative Framework



A. GOAL A – Integrate MUSC's model init iatives focused on health disparities into SE VI EW by identifying programmatic synergies and streamlining administrative processes.

A1. Objective A1 – Esta blish a sin gle <u>Administrative and Coordinating Core</u> to oversee project logistics, financial transactions, regulatory compliance and bi-directional communications.

Effective leadership and management ensure that SE VIEW initiatives are fully realized. SE VIEW has strong support at the highest levels at MUSC. The Principal Investigator, Project Manager, Finance Director and Initiative Directors are highly capable individuals with the commitment, experience and authority to conduct SE VIEW.

A1a. Southeastern VIEW Administrative Core (SEVAC)

Team:

- Jennifer Friday, PhD (Evaluation Consultant)
- Thomas Gordon, PhD (Strategic Planning Consultant)
- Sabra C. Slaughter, PhD (SE VIEW Principal Investigator)
- Tracey W. Smith, MHA (Program Manager)
- Bart Yancey, MPA (Business Manager)

Figure 3. SE VIEW Organizational Chart

Fig. 3 shows the SE VIEW Organizational Chart. Key elements include a well-defined academic home, clear leadership, synergistic programs and committee structures. Individual initiatives are aligned under the three program headings. SEVAC ensures that lines of communication, agendas, actions and decisions are coordinated and targeted to the project goals and objectives. SEVAC staff coordinate activities across the region, convene committee and town hall meetings, host retreats, manage program logistics, and ensure overall operational efficiency.

A1b. Director and Principal Investigator

Sabra Slaughter, PhD, SE VIEW Principal Investigator, serves as Chief of Staff in the Office of the President of MUSC. He previously directed the SC Area Health Education Consortium (AHEC). Dr. Slaughter earned a PhD in psychology from the University of Michigan. He has extensive administrative experience in health professional education, outreach and workforce diversity. He has been PI of 9 major extramural projects related to healthcare and health disparities. As Chief of Staff, Dr. Slaughter works closely with the MUSC Board of Trustees, President, Vice Presidents, Deans and Faculty. He has the authority to make institutional decisions and commitments in developing SE VIEW policies and procedures, and is authorized to manage the adoption and implementation of best practices.

A1c. Strategic Planning Consultant

SE VIEW has engaged TAGA Consulting, a strategic planning and consulting company, to help design, facilitate and support strategic planning and ongoing quality improvement processes. TAGA's founder and principal, Thomas A. Gordon, PhD, is a licensed psychologist with degrees from Harvard University and the University of Michigan. Dr. Gordon has provided strategic consulting services to public and private institutions including Aetna Healthcare, AT&T, Johnson & Johnson, Merck Pharmaceuticals, Siemens, US Army, US Dept of Labor and US Postal Service. Responsibilities include collaborating on the design of the planning process, supporting the flow of information between SE VIEW initiative directors and key stakeholders to identify synergies and minimize barriers; developing processes to ensure effective communications, cultural sensitivity and shared focus on SE VIEW activities; and developing and guiding change management activities to support commitment to the SE VIEW plan.

A1d. Committee Structure

Internal and external committees facilitate coordination and accountability. Committee members and stakeholders will receive annual progress reports in addition to interim (quarterly and ad hoc) reports, plans and assessment materials.

Executive Committee (EC). The Executive Committee (EC), composed of the Initiative Directors, is SE VIEW's internal committee for communication, collaboration and management. The PI serves as chair, the Program Manager serves as Executive Secretary, and the Evaluation & Tracking Director is a standing

advisor. The EC holds bi-monthly 3.5-hr meetings (**Appendices 1-5**). Each meeting includes 2-3 scheduled 'stand-up' 15-min program reports on recent progress, challenges, alternatives, results and future directions as well as 3-min 'roundtable' updates from other program leaders. The EC's role is to ensure integration among initiatives, advise on issues common to all SE VIEW initiatives such as resource utilization, and see that SE VIEW milestones are met in a timely manner. The members are responsible for evaluation and tracking with direct input from the Evaluation & Tracking Director.

External Advisory Committee (EAC). The EAC will include four nationally recognized experts in health disparities, three civic/community leaders, and one TATRC member. The EAC will meet annually to review SE VIEW's impact, integration and productivity based on measurable progress toward goals and to advise SE VIEW leadership concerning scientific direction and results. Two-day meetings will include oral and poster presentations by Initiative Directors, integrative reports by SEVAC leadership, and at least one community on-site visit. Quarterly reports and frequent e-mail interactions will ensure informed oversight, continuity and communication between meetings. The EAC will receive written and oral reports from the Evaluation & Tracking Program. They will review the performance of the PI and make recommendations for enhancing impact and effectiveness. EAC Community members, in tandem with SE VIEW Initiative Directors, will help create a plan for community education, outreach and advocacy that is responsive to the diversity, needs and interests of the communities served by SE VIEW. The SEVAC management team is currently interacting with potential EAC members; the first EAC meeting will review Phase I and set the stage for full implementation of Phases II and III.

A2. Objective A2 – Establish an Evaluation & Tracking Core to monitor SE VIEW activities and provide timely feedback to the Principal Investigator, Initiative Directors and TATRC to improve program quality.

The SE VIEW Evaluation Plan is being finalized; the implantation process began in the third quarter. SEVAC has engaged Jennifer C. Friday, PhD, of The Friday Consulting Group, to provide expertise and guidance in designing and implementing the Evaluation Plan. Dr. Friday is a behavioral scientist with >25 years' experience in researching and evaluating health and education programs. She received her BS in biology from Millikin University, and master's and doctoral degrees in psychology from the University of Tennessee, Knoxville. For 13 years she worked at the CDC in programs dealing with HIV/AIDS and violence prevention. Dr. Friday's policy development skills were honed at the Joint Center for Political and Economic Studies in Washington, DC. She has facilitated workshops and training programs, devise strategic plans, and guided program planning and evaluation for government agencies, community-based organizations, and for-profit and non-profit entities, including Community Health Outreach Works, Inc., Alliance for Christian Media, Oakhurst Community Health Center, and the Rosalynn Carter Institute for Human Development.

The evaluation consultant will: (a) develop the logic model; (b) identify key success indicators and measures for each initiative; (c) develop the evaluation plan and framework for the overall SE VIEW project; (d) keep performance indicators and data collection focused on measures of success; (e) demonstrate the value of increased effectiveness and efficiency; (f) utilize quality improvement methods to achieve evaluation aims; and (g) work with participants on how to utilize evaluation data. The SE VIEW Evaluation Plan includes process, outcome and impact evaluation. The impact evaluation will be designed now as part of the Evaluation Plan, and implemented at a future date when SE VIEW is completed and/or integrated into the community.

Process Evaluation. The process evaluation will document and analyze implementation of the project. This includes identification and integration of the individual initiatives into the overall SE VIEW project. Data collection methods will include document reviews such as quarterly reports, minutes from bi-monthly project meetings, key informant interviews and observations. Data and information from the process evaluation component will be used to provide feedback to improve services on an ongoing basis.
Outcome Evaluation. The outcome evaluation will document whether project goals and objectives were met. The first project year (Phase I) will conclude with development of the evaluation plan and

integration of the individual initiatives in the overall SE VIEW Evaluation Plan. Each initiative will develop a baseline for its activities.

Impact Evaluation. The impact evaluation will focus on the extent to which SE VIEW activities made a difference in the target community. This will include changes in community health status, improved access to care and general improvement in health delivery systems.

Data Plan

The evaluation will utilize both qualitative and quantitative data. Qualitative data will include document reviews, individual interviews, focus groups and surveys. Quantitative data will be collected through implementation activities, participation rates, self-report questionnaires, curriculum assessments, and other program activities.

Data will be gathered utilizing a variety of methods and modalities. Utilizing multiple data sources is critical because of the variety of activities that each of the projects will be engaging in. This will help to facilitate gathering a variety of information that will be helpful in understanding how the program is being implemented and the progress towards achieving the program outcomes.

Baseline data will be collected by each of the SE-VIEW projects at the outset. These baseline data will be summarize for use by SE-VIEW as the starting point for the overall evaluation. Process evaluation data will be ongoing and additional data to support the process evaluation will be collect quarterly or as needed for the established reporting system. Outcome data will be collected once a year during the project period.

In addition to the data collected by the individual projects, the overall SE-VIEW project will also collect data to supplement the information received. Data collection methods will include the following:

- **Case Studies**
  Case studies of SE-VIEW projects may be conducted to take a thorough look at the steps needed to develop, implement, and evaluate the project. This would provide an in-depth description about what is needed for effective service delivery and achievement of outcomes.
- **Document reviews**
  Analysis of documents that include but are not limited to program records, research reports, census data, health records, as well as newspaper and magazine articles. Paper and computerized archival data will be collected and analyzed, attendance at all program functions will be recorded and monitored, and site visits by members of the evaluation team will be used to provide feedback on the fidelity of implementation
- **Focus Groups**
  Focus Groups with subsets of the communities beings served, participants, partners and others will be conducted to gather in-depth information related to the activities of SE-VIEW.
- **Interviews**
  Data will be collected with in-person or telephone interviews and with targeted focus groups. This will provide qualitative data that will be incorporated into both the process and outcome components of the evaluation.
- **Medical Assessments and Tests**
  An assortment of medical assessments and diagnostic tests will be administered by the SE-VIEW projects. These include, but are not limited to blood pressure readings, hemoglobin A1C, cultures.
- **Observations**
  Observe situations, behaviors and activities in a formalized and systematic way, usually using observational checklists and trained observers.
- **Surveys and written data collection instruments**
  Data will be collected through the use surveys that will be collected in a variety of ways including in-person, online, phone and mail. These surveys may be developed for the individual programs or may be

existing standardize measures. We will also utilize program logs and other data collection methods use as part of the regular program activities. In addition, evaluation staff will participate in project meetings and other program activities where their presence will not interfere with program delivery or data collection. Paper and computerized archival data will be collected and analyzed, attendance at all program functions will be recorded and monitored, and site visits the evaluation team will be used to provide feedback on the fidelity of implementation.

Data Analysis

The mixed model nature of the data to be collected will require a variety of data analysis methods. Data will be analyzed using standard statistical packages and will include descriptive and inferential statistics. The data analysis will be developed as the final program plans are approved and implemented.

The preliminary evaluation logic model has been developed and provided as a deliverable to TATRC. The basic framework utilizes the SE VIEW goals and objectives to develop guidance for identification of short, medium and long-term outcomes. Each SE VIEW initiative has been linked to the SE VIEW goals. Each has submitted individual logic models and evaluation plans. Dr. Friday is working with each Initiative Director to link and integrate their evaluation outcomes into the SE VIEW Evaluation Plan. The inputs necessary for SE VIEW to be successful have been identified. SE VIEW activities include instructional and research activities, outreach and service activities, health care delivery and prevention services, and policy activities. The targeted communities are the I-95 Corridor and Coastal Carolina counties, which represent all the racial and ethnic populations and socio-demographic groups affected by health disparities. The broad range of outcomes has been identified. These will become more specific and targeted as the individual initiatives complete their own evaluation plans. The outcomes that directly relate to SE VIEW will be incorporated into the overall Evaluation Plan. Similarly, the data sources will be redefined and drawn from the individual projects. The general evaluation questions have been stated. The Evaluation Plan is in progress and being fine-tuned. When it is finalized, the specific questions to be addressed will be incorporated into the overall Evaluation Plan. Additional indicators will also be identified as we progress through the implementation of the project. **Table 1** illustrates the SE VIEW Evaluation Logic Model.

Table 1. SE VIEW Evaluation Logic Model

VISION - The Southeastern VIEW's vision is to develop a nationally recognized multidisciplinary, inter-professional team of researchers, educators, outreach professionals and laypersons to eliminate health disparities.

GOAL A – Integrate MUSC's model initiatives focused on health disparities into the Southeastern VIEW by identifying programmatic synergies and streamlining administrative processes.

OBJECTIVES:

A1: Establish a single Administrative and Coordinating Core to oversee project logistics, financial transactions, regulatory compliance, and bi-directional communications.

A2: Establish an Evaluation and Tracking Core to monitor SE VIEW activities and provide timely feedback to the Principal Investigator, Initiative Directors and TATRAC to improve program quality.

GOAL B – Develop strategic partnerships and programs to address the burden of health disparities.

OBJECTIVES:

B1: Establish an Educational Program to reduce health disparities: Program initiatives will focus on increasing awareness of health issues in communities that bear a disproportionate burden of chronic diseases, and address educational deficits related to chronic diseases.

SE VIEW Projects linked to this goal:

- MUSC Public Information and Community Outreach Initiative (PICO)
- Community Institutes for Traditional and Nontraditional Leaders

B2: Establish a Preventive Medicine, Health and Wellness Program to reduce health disparities: Program initiatives will expand proven strategies and/or develop novel methods to engage communities, and remove barriers to effective healthcare.

SE VIEW Projects linked to this goal:

- Stroke Risk Reduction Initiative (SRRI)
- Heart Health Initiative
- SC TeleSupport: Diabetes Management Initiative
- Tele-Critical Care Program to Reduce Health Disparities (CREST)
- Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population

B3: Establish a Community Partnerships and Outreach Program to reduce health disparities: These activities will provide the foundation for integrated efforts to address chronic disease burden in populations that could provide talented recruits for military service, and disseminate evidence-based research findings.

SE VIEW Projects linked to this goal:

- Lean Team Initiative
- Community Engaged Scholars Initiative (CES)
- The Health Empowerment Zone (HEZ)
- Healthy People in Healthy Communities
- Mobile Outreach Van Educational and Navigational Health Services for Underserved Populations Initiative (MOVENUP)

INPUTS	OUTPUTS		OUTCOME			DATA
	Activity	**Target Population**	**Short Term**	**Med. Term**	**Long Term**	**Data Sources**
-Churches/Faith-Based Organizations -Clinics/Health Centers -Emergency Dept. -Federal Clinics -Funding Support -Government Agencies -Grocery Stores -Healthcare System -Hospitals Materials - Training Tools - Evaluation -MUSC -Health Clubs -PTO -Restaurants -Schools -SE View Consultants -SE View Programs 1. SSRI 2. CES 3. Healthy People 4. SC TeleSupport 5. CREST 6. MOVEN UP 7. Heart Health 8. Lean Team 9. Telemed-Alzheimer's 10. MUSC-PICO 11. Community Institutes 12. HEZ -SE View Staff -Tools -Worksites	Community Engagement Consultation Cultural Exchange Healthcare Health Promotion Health Career Academy Instructional Mentoring Networking Outreach Policy Prevention Research Screening Service Training Web and Internet Wellness Council	Communities -I-95 Corridor -Coastal Carolina Groups -African Americans -Community Leaders -Elderly -Obese children -Rural population -School children -Teenagers	-Increase knowledge base knowledge -skills -awareness	Utilization of knowledge base	Increase in positive behaviors Decrease in negative behaviors	Activity Logs Attendance Logs Behavioral Risk Factor Surveillance System Census Data Clinic Data Community Members Community Partners Comorbidity (DRGs & ICD-9) Council of Governments De-Identified Ref. Lists Follow-Up Records Federally Qualified Health Centers Patient Electronic Care Sys. (FQHC - PECS) Partners Hospital Discharge Data Institutional Data Land Developers Medicare/Medicaid Data Meeting Agendas Meeting Minutes MUSC Faculty MUSC Students Neighborhood Assoc. Office Of Vital Records Participant Logs Program Data Program Faculty Program Participants Public Access Info Registration Forms SC Dept of Health SC Off. Of Res. & Statistics School Attendance Zones School Data Secondary Sources Standardized Media Contact Form Store Audit Survey Structured Activity Form

						Telephone Logs Transportation Authority Web “Hits” Working Group Rpts. Youth Risk Behavioral Surveillance System **Data Collection Methods** Case Studies CDC Change Questions Clinical Screenings Current Resource List Focus Groups Interviews Key Informant Interviews Medical Assessments/Tests Observation Organizational Assessments School Cafeteria Audits Screening Tools Service Delivery Surveys –General Tests/Assessments Walkability Survey Windshield Survey **Data Collection Measures** Clinical Dementia Rating Scale. Clock Drawing Test Continuing Educ. Credits Depression (PHQ-9) Diabetes Fatalism Scale Diabetes Knowledge Questionnaire Diagnostic Evaluations Essential Medical Tests/Screens -Hemoglobin A1C -Blood Pressure -Cultures -Body Mass Index - Lipids Profile Geriatric Depression Scale Health Literacy

						Logical Memory IIA Medical Comorbidity (Charlson Index) Mini Mental State Exam Modified Hachinski Ischemia Scale Morisky Medication Adherence Scale Patient Demographics Survey Perceived Diabetes Self Efficacy Scale Quality of Life Measures Resource Use Social Support Standard Clinical Assessment Summary of Diabetes Self-Care Activities Scale Supportive Care Measures

Evaluation Questions						
Process Evaluation Questions			**Outcome Evaluation Questions**			**Impact Evaluation Questions**
Inputs	**Activities**	**Target Population**	**Increase Knowledge**	**Change Behavior**	**Achieve Outcome**	
-How many resources (human and financial) needed to achieve goals? -Who will implement the program? -Who provided program services? -What are characteristics of coalitions, collaborations, partnerships, etc.? -Are the resources (human and financial) adequate?	How many programs/sessions/activities delivered? What services/activities were provided? Was the curriculum delivered as intended? Are implementation objectives being attained? What was the quality of the delivery (consistency and fidelity)?	How many participants are in program? How many participants are in each session/activity? What is the participant's level of satisfaction with the program/activity? What were the barriers or problems with implementation? What were the facilitators to implementation?	Did knowledge increase?	Did we have behavioral changes?	Was programmatic integration achieved? Were strategic partnerships established? Are outcome objectives being achieved? Did the projects/interventions improve access to services? Did the projects/interventions improve quality of services provided?	-Which aspect of the program contributed more to the outcomes? -Which aspect of the program contributed more to the outcomes? -Are there unintended outcomes? -Are participants satisfied with program (implementation and outcomes)? -What do participants do differently because of the program? -Whom does this program affect (directly and indirectly)? -Who benefits from this program and how? -Are the programs results worth the resources?

Indicators		
Levels of participation Levels of service and activity Levels of support Establishment of advisory groups Listing of community programs and Services Evidence of partnership activities	Achievement of objectives Changes in knowledge Changes in behavior Changes vending machine choices Changes in physical activity Improved nutrition Increase in DASH-type meals	Research productivity Reduction in health indicators Increased access to health care services

B. GOAL B – Develop strategic partnerships and initiatives to address the burden of health disparities.

MUSC has substantial strengths serving the goals of education, prevention, community partnership and research to eliminate health disparities. These include a dynamic and diverse faculty, outstanding facilities, a strong and diverse student body, and many existing community ties. Building on these strengths, SE VIEW has identified and integrated robust programs focused on the elimination of health disparities to ensure a military ready workforce, retention of active duty personnel, and continued health in VA health services.

As shown in **Fig 2**., SE VIEW's community-based research and service initiatives are aligned under three program categories addressing **Education (B1)**, **Preventive Medicine, Health and Wellness (B2)** , and **Community Partnerships and Outreach (B3)** . The alignment of initiatives with these objectives is based on primary thrust and specific goals of each project. However, all the programs use resources and tools that integrate educational, disease prevention/health promotion, and community engagement principles.

To illustrate SE VIEW's synergies, thematic interactions and potential for administrative efficiencies, **Tables 2-4** chart all the SE VIEW initiatives as programmatic clusters with respect to three integrative concepts: **Stages of Life, Community Engagement and Empowerment Strategies, and Disease Targets.**

Table 2. SE VIEW's Comprehensive Plan to Reduce Health Disparities Across the Lifespan

Objectives/Approaches	Stages of Life		
	Children	Adolescent	Adults
B1 EDUCATIONAL PROGRAMS TO REDUCE HEALTH DISPARITIES			
B1a Public Information and Community Outreach (PICO)	■	■	■
B1b Community Institutes for Traditional and Nontraditional Leaders	■	■	■
B1c Health Careers Academy & Junior Faculty Development		■	■
B2 PREVENTIVE MEDICINE, HEALTH AND WELLNESS PROGRAMS			
B2a Stroke Risk Reduction Initiative		■	■
B2b Heart Health Initiative (Preventive Cardiology Research)	■	■	■
B2c SC TeleSupport (Diabetes Management Initiative)			■
B2d Tele-Critical Care to Reduce Rural Health Disparities			■
B3. COMMUNITY PARTNERSHIPS AND OUTREACH PROGRAMS			
B3a Lean Team Initiative	■	■	■
B3b Community Engaged Scholars – Collaborations in CBPR	■	■	■
B3c Mobile Outreach Van (MOVENUP) Initiative		■	■
B3d Health Empowerment Zone	■	■	■
B3e Healthy People in Healthy Communities	■	■	■
B3f Telemedicine in the Eval. of AD in a Rural, African American Population			■

TABLE 3. SE VIEW'S Cross-cutting Community Engagement and Empowerment Strategies

Objectives/Approaches	Strategies				
	CBPR	Health IT	Health Literacy	Tele-medicine	Work-force dev.
B1 EDUCATIONAL PROGRAMS TO REDUCE HEALTH DISPARITIES					
B1a Public Information and Community Outreach (PICO)			■		■
B1b Community Inst for Traditional and Nontraditional Leaders			■		■
B1c Health Careers Academy & Junior Faculty Development			■		■
B2 PREVENTIVE MEDICINE, HEALTH AND WELLNESS PROGRAMS					
B2a Stroke Risk Reduction Initiative		■		■	■
B2b Heart Health Initiative (Preventive Cardiology Research)		■	■		■
B2c SC TeleSupport (Diabetes Management Initiative)		■	■	■	
B2d Tele-Critical Care to Reduce Rural Health Disparities		■	■	■	■
B3. COMMUNITY PARTNERSHIPS AND OUTREACH PROGRAMS					
B3a Lean Team Initiative			■		■
B3b Community Engaged Scholars – Collaborations in CBPR	■		■		■
B3c Mobile Outreach Van (MOVENUP) Initiative			■		■
B3d Health Empowerment Zone	■		■		■
B3e Healthy People in Healthy Communities			■		■
B3f Telemed. in the Eval. of AD in a Rural, African American Pop.		■		■	

TABLE 4. SE VIEW'S Strategic Targets for Reducing Health Disparities

Objectives/Approaches	Representative Health Disparities Targets									
	Primary Care	Alzheimer's/ Aging	Cancer	Diabetes	Heart Dis & Hypertension	HIV/AIDS	Obesity	Oral Health	Substance Abuse	Stroke/ Critical Care
B1 EDUCATIONAL PROGRAMS TO REDUCE HEALTH DISPARITIES										
B1a Public Information and Community Outreach (PICO)	■	■	■	■	■	■	■	■	■	■
B1b Community Institutes for Traditional and Nontraditional	■	■	■	■	■	■	■	■	■	■
B1c Health Careers Academy & Junior Faculty Development	■	■	■	■	■	■	■	■	■	■
B2 PREVENTIVE MEDICINE, HEALTH AND WELLNESS PROGRAMS										
B2a Stroke Risk Reduction Initiative										■
B2b Heart Health Initiative (Preventive Cardiology Research)	■			■	■		■			
B2c SC TeleSupport (Diabetes Management Initiative)	■			■	■		■			
B2d Tele-Critical Care to Reduce Rural Health Disparities										■
B3. COMMUNITY PARTNERSHIPS AND OUTREACH PROGRAMS										
B3a Lean Team Initiative	■			■	■		■			
B3b Community Engaged Scholars – Collaborations in CBPR	■	■	■	■	■	■	■	■	■	■
B3c Mobile Outreach Van (MOVENUP) Initiative	■		■							
B3d Health Empowerment Zone	■			■	■	■	■		■	
B3e Healthy People in Healthy Communities	■			■	■		■			
B3f Telemed. in the Eval. of AD in a Rural, African American Pop.	■	■								

B1. Objective B1: Establish an Educational Program to reduce health disparities.

Program initiatives focus on increasing awareness of health issues in communities that bear a disproportionate burden of chronic diseases and address educational deficits related to chronic diseases. The Educational Program includes three initiatives aimed at target audiences at local and national levels and age groups across the lifespan.

B1a. MUSC Public Information and Community Outreach (PICO) Initiative

Director: David Rivers, MA, Assistant Professor, Dept of Library Science and Informatics
Goals: Heighten public awareness of health issues; provide prevention and health screening opportunities; promote awareness of and access to affordable and culturally competent care.
Distinguishing Characteristics: Recognition of the unique relationship between human health, environmental quality, environmental justice and economic development in determining quality of life.
Summary of Activ ities: National Conference on Health Disparities (Nov 2010 in Philadelphia, attendance ~575; November 2011 in Charleston, SC); Statewide Educational TV *Our Health* series; *Hands On Health* interactive website; health literacy workshops/trainings

National Conference on Health Disparities. The importance of access to health care services that focus on prevention and treatment for all members of the community is well established. This is also true for access to safe and affordable housing, effective schools, reliable transportation, playgrounds, clean water, a safe environment and basic services to meet the needs of people. Yet, even in the healthiest communities, age-old disparities persist and exact an extreme toll on quality of life and economic resources. How do we address these disparities and build viable, healthy communities? The Fourth Annual National Conference on Health Disparities (Nov. 10-13, 2010; Philadelphia, PA) addressed questions about non-medical determinants of health, including education levels, health literacy, poverty, public safety, community design, access to care, environmental quality, environmental justice, and personal, government and corporate responsibility. Conference presenters and participants discussed solutions, reviewed "programs that work," and recommended policies to strengthen and enhance the current traditional "medical model" of health care through diverse, multi-disciplinary partnerships and perspectives. [1]

***Our Health Series* Made-For-Television Dialogues.** The Our Health Series brings together a skilled moderator, expert panelists and active and informed studio audiences to address specific diseases and conditions that contribute to health disparities. While issues on the table are national in scope, the goal is to deliver a program that brings these issues home to South Carolinians in a way that suggests and encourages positive actions and responses. During 2010-11, PICO produced one Our Health Series dialogue, entitled Our Health: Overcoming Obesity, at the ETV studios in Columbia, SC. [2]

Hands on Health-SC. Hands on Health-SC is a consumer health information website that pays special attention to health issues of particular importance to SC citizens and communities. It is a gateway to reputable Internet health sites with additional content in both English and Spanish written for readers with low-literacy skills. Features of the site include plain language articles on the diseases and health issues that are South Carolina's Biggest Health Problems, "Go Local-SC" which is Hands on Health's statewide directory of health services, many of them free or low in cost. [3]

Health Literacy Workshops/Trainings. Conducted by the Hands on Health-SC staff using training and skill-building materials that have been tested with diverse populations, including high school students, seniors, service professionals, and ethnic groups.

B1b. Community Institutes for Traditional and Nontraditional Leaders

Director: David Rivers, MA, Assistant Professor, Dept of Library Science and Informatics
Goal: Help communities and constituencies build capacity to identify, access and develop leadership resources.
Distinguishing Characteristics: Integration of health disparities research and public policy directives through linkage of scientific, political and local communities; incorporation/cultivation of nontraditional (artists, musicians, athletes) as well as traditional leaders (elected officials, preachers, lawyers etc.).
Summary of Activ ities: 2-day Community Leadership Institutes (CLI); Technical Assistance Workshops (TAW)

Community Leadership Institutes. Community Leaders Institutes identify and support community-based leaders and resources needed to address health disparities and related issues. CLIs recognize and emphasize the unique relationship between environmental protection, human health, environmental justice and economic development as essential related elements of successful community development programs. Progress requires informed and active leaders. During 2010-11, PICO and SE VIEW conducted a total of five CLIs in the following locations: Johns Island, SC, Tougaloo/Jackson, MS, New Ellenton/Jackson, SC, Florence, SC and Blackville, SC. **Appendices 6-11** provide the CLI evaluation results.

Technical Assistance Workshops . Technical Assistance Workshops emphasize essential "how-to" skills needed for preparing and managing a "good" grant application. During 2010-11, PICO conducted TAWs in Waynesboro/Burke, GA and Augusta, GA

B1c. Health Careers Academy and Junior Faculty Development

Director: Sabra C. Slaughter, PhD, Chief of Staff, Office of the President; Associate Professor

Goal: Increase diversity in the healthcare workforce and the health disparities research arena.

Distinguishing Characteristics: Health Careers Academy: One-on-one mentoring, parental involvement, ongoing academic advisement and career tracking. Junior Faculty: Scientific and career mentoring, time management assistance, protected time for research, grantsmanship mentoring, and regulatory training and assistance.

Summary of Activities: Health Careers Academy: 1-wk residential summer program for undergraduates to prepare for competitive admission to medical, dental or nursing school. Junior Faculty: Debbie C. Bryant, RN, MSN, DNP, has completed her dissertation research project and is developing a community-based initiative in cancer health disparities. Ida J. Spruill, RN, MSN, PhD, submitted an NIH proposal for an innovative study to reduce ethno-cultural barriers to health literacy and disease management in African Americans.

Health Careers Academy

This program is designed to increase the acceptance, retention, and graduation rates of under-represented minority and disadvantaged students to nursing, dental, medicine and pharmacy training programs in South Carolina. The Academy is conducted in collaboration with the South Carolina AHEC, MUSC College of Nursing, College of Dental Medicine, College of Medicine, Library and the South Carolina College of Pharmacy.

The 2011 Academy was held June 5 – 10 on the campus of the Medical University of South Carolina and serviced 41 participants that represent the following SC counties: Allendale, Anderson Bamberg, Berkeley, Charleston, Clarendon, Dorchester, Florence, Greenville, Hampton, Horry, Laurens, Lexington, Marion, Pickens, Richland, Spartanburg and Sumter. Other details of the 2011 Academy include:

- Student Areas of Interest
  - Dental Medicine: 5
  - Medicine: 15
  - Nursing: 15
  - Pharmacy: 6
- Program Disparity Topics
  - Hypertension
  - Adolescent Depression
  - Osteoporosis
  - Periodontal Disease
- Program Agenda Topics
  - Academic Advising
  - Personal Interviewing

- Research Resources and Techniques
- Personal Networking
- Naval Healthcare Careers

The students are slated to begin their college careers in the fall of 2011. They have enrolled in the following colleges and universities: Anderson University, Bob Jones University, Claflin University, Clemson University, Coastal Carolina University, College of Charleston, Florence-Darlington Technical College, Francis Marion University, Furman University, Greenville Technical College, Howard University, Lander University, Medical University of South Carolina, Midlands Technical College, North Greenville University, Presbyterian College, South Carolina State University, University of SC Upstate, University of South Carolina and Winthrop University.

Junior Faculty Development:
SE VIEW extends training and professional development programs aimed at junior faculty development (JFD). The SE VIEW JFD program provides protected research time for health disparities research and regulatory training. The purpose is for the participants (Debbie C. Bryant, RN, MSN, DNP and Ida J. Spruill, RN, MSN, PhD) to gain practical experience with:

- Conducting community-base health promotion intervention research and practice with individuals in South Carolina
- Identifying and facilitating skills and resources to enhance intrinsic community capacity
- Training with intervention delivery and evaluation
- Regulatory training and maintaining quality control of study/outreach implementation
- Ensuring scientific and ethical integrity of study/service
- Reporting results of study/service outcomes.

Drs. Bryant and Spruill have made significant progress since the inception of the program. Please see the section entitled "Key Research Accomplishments" for more details.

B2. Objective B2: Establish a Preventive Medicine, Health and Wellness Program to reduce health disparities.

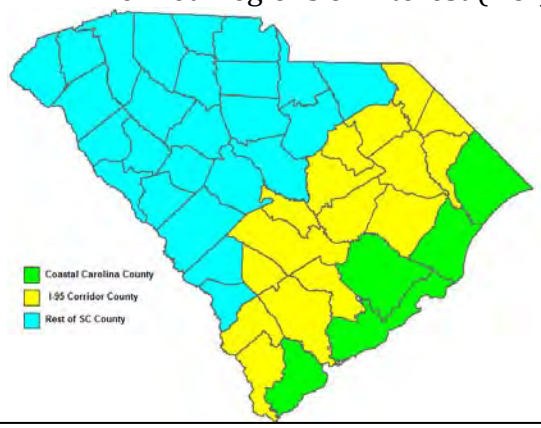
Program initiatives will expand proven strategies and/or develop novel methods to engage communities and remove barriers to effective healthcare. This objective includes four initiatives.

B2a. Stroke and Stoke Risk Reduction Initiative (SSRI)
Director: Robert Adams, MD, Professor of Neurology; Director of the South Carolina Center of Economic Excellence; Director of the MUSC Stroke Center
Goals: Extend access to expert stroke care to SE VIEW regions, which have very high stroke incidence, morbidity and mortality rates; develop stroke-related CME/CEU-certified education for healthcare providers.
Distinguishing Characteristics: Hub-and-spoke model integrating information technology (IT) and health information technology (HIT) with highly specialized medical expertise to deliver expert care in rural/remote areas; collaborations and mentoring between academic medical center experts and community-based providers; time-critical, cost-effective delivery of evidence-based medicine that can save lives, reduce risk of permanent disability, and improve quality of life.
Summary of Activities: Enlisted a total of 11 SC rural/community hospitals in the network to date with 2 more in discussion; developed Epidemiology Profile for SE VIEW disparities data repository; began CME initiated concept development.

South Carolina lies in the "buckle" of the Stroke Belt, suffering from a disproportionate burden of many chronic maladies including hypertension and stroke. The problem is compounded by the rural nature of the state and the ethnic and socio-economic disparities that amplify the incidence, prevalence, and

complications associated with these diagnoses. With escalating health care costs impacting federal, state, and employer budgets, the economic consequences of disparities could be a key driver to effecting change, improving the quality of care for many Americans, and ensuring a military-ready population. The Stroke and Stroke Risk Reduction Initiative (SSRI) proposes to address these issues by enhancing the REACH (Remote Evaluation of Acute Ischemic Stroke) telemedicine system to attain earlier identification and management of patients with hypertension, especially those who are young and rural. The focus is on education, novel use of REACH Telemedicine, and to target stroke-related areas of disparity. These efforts are relevant because: we have far too many strokes, too many young persons are having stroke and too few patients are being treated urgently for stroke. The aims of this initiative are to: (1) Define and characterize the primary regions of interest; (2) Benchmark regions with and without REACH and evaluate the impact of telemedicine with regard to: access to care, awareness of stroke symptoms, appropriate response to stroke, attitudes regarding treatment, time from onset of symptoms to Emergency Department, and use of Alteplase (tPA); and (3) Provide targeted stroke and stroke prevention CME programs to health providers in the ROI. As a refinement to these initial aims, SSRI has also: (4) established an SE VIEW data repository, also known as the epidemiology core; (5) developed and submitted its first research protocol for IRB/USAMRMC ORT approval; (6) expanded and improved access to stroke care through REACH; and (7) developed an administrative framework that supports SE VIEW's vision of developing "a nationally recognized multidisciplinary, inter-professional team of researchers, educators, outreach professionals and laypersons to eliminate health disparities." For more details, please refer to **Appendix 12**: SSRI Overview Presentation.

FIGURE 4:
Aim 1: Defined Regions of Interest (ROI)



For more detail, see ***Appendix 14****: SE VIEW ROI*

As a new initiative within the MUSC Stroke Center, the first tasks of the Stroke & Stroke Risk Reduction Initiative (SSRI) during this initial grant year were to establish an SSRI administrative framework from which to **define and characterize the regions of interest (Aim I)** that would be used for this research**.** Its highly respected primary investigators, Robert Adams, MS, MD and Daniel Lackland DrPH, recruited a multidisciplinary, inter-professional team of researchers, educators, and outreach professionals. The SSRI team has expanded and now includes neurologists, emergency medicine physicians, nurses, administrators, epidemiologists, health economists, disparities experts, research specialists, outreach personnel and others. Potential partners are regularly invited to the weekly SSRI meetings and numerous collaborations have been created or expanded. Also, SSRI formed an Epidemiology Core within the team and began to collect preliminary disparities data needed to define and characterize the ROI. For this purpose, an Epidemiology Profile was developed and presented for endorsement at the November 4, 2010 SE VIEW Executive Meeting (**Appendix 13**). The approved SE VIEW Regions of Interest are depicted in **Fig. 4** above, are further described in **Appendix 14**, and can be seen on the SE VIEW website (http://academicdepartments.musc.edu/seview/projects/index.html). [4] The two primary ROIs are the I-95 Corridor and Coastal Carolina – the regions where health disparities in S.C. are highest.

This **completed the initial Aim I**, which was subsequently refined into two **new/revised aims** to support the original scope of work:

- **Aim I: SSRI Program Administration**: Maintain a strong, multidisciplinary team able to support program aims in a collaborative manner.

- **Aim IV: SE-VIEW Data Repository (a.k.a. Epidemiology Core):** Developed Epidemiology Profiles & began to acquire/maintain overall data sets as a common resource for all SE VIEW cores.

Administratively, the SSRI Team continued its work; supporting and refining the aims of SE VIEW and SSRI while presenting and promoting these aims and early research findings in a variety of public forums and media venue (for details, see **Appendix 15**: Promotional Activities Update). SSRI investigators and/or their representatives consistently participated in all SE VIEW meetings and completed all required reports, while developing numerous administrative tools to support these efforts including an action-oriented weekly meeting agenda. Additionally, the team met with the SE VIEW evaluation consultant and has developed a Gantt chart tracking device used to plan, track and report activities each quarter (**Appendix 16**). **Please refer to this Gantt chart in Appendix 16 for a detailed quarterly outline for all SSRI aims, activities and accomplishments described in this report.**

During this first year, much of SSRI's research efforts were centered around **Aim II: Benchmark regions with and without REACH and evaluate the impact of tele medicine with regard to: (A) Access to care; (B) Awareness of stroke symptoms, appropriate response to stroke, attitudes regarding treatment; (C) Time from onset of symptoms to Emergency Department; and (D) Use of Alteplase (tPA)."** Toward this aim, data were collected where available and preliminary baseline analyses began. Early in the grant year, a **research study protocol** was developed which proposes to conduct both primary research and secondary analyses to address this aim. **Appendix 17 contains the Protocol**. The SSRI Protocol was one of the first in SE VIEW to receive MUSC Institutional Review Board **(IRB) approval** (Protocol #00008039). The Protocol was then submitted to USAMRMC ORT for final approval, along with a scientific letter from the IRB (dated February 25, 2011). One issue was subsequently mentioned by USAMRMC ORT, but was rapidly addressed by SSRI and the IRB. However, **final USAMRMC ORT approval is still pending**. **Without this final USAMRMC ORT approval, many aspects of the SSRI research cannot be completed and remain pending.** Please refer to **Appendix 16** for a detailed listing of these pending activities, which are marked as "pending" waiting for "USAMRMC ORT."

While many of SSRI's aims are on hold pending final protocol approval, **Aim II-A: Access to Care was completed** using existing and publically available resources. The map seen in Appendix 15 shows the dramatic affect that a telemedicine solution can have upon access to expert stroke care; illustrating how few Primary Stroke Centers there are in S.C. and how REACH has improved geographic access to stroke resources. **As noted in Appendix 6: "With REACH, 76% of South Carolinians now are within a 60-minute drive of tPA treatment compared to 38% prior to REACH. The percent increase in access was highest along the I-95 corridor; a predominantly rural, high disparities region of S.C."** The findings from this original access analyses were refined and accepted as a poster presentation at the Academic Health Conference in Seattle, WA in June 2011 (see **Appendix 18: Access Poster**). Further refinements are ongoing and are expected to lead to submission of an abstract for national publication during FY2012.

Aim II-B focuses on examining "awareness of stroke symptoms, appropriate response to stroke, and attitudes regarding treatment." To accomplish this aim, a survey of all patients having a REACH telestroke consult was developed, tested and incorporated in the previously mentioned protocol (**Appendix 17**). Again, this protocol describes our research design and methods and contains all patient survey materials. While awaiting USAMRMC ORT approval of the protocol, SSRI was able to move forward with the aim by communicating with all REACH MUSC hospital leaders, notify them of this research proposal, and provide copies of the patient materials, while also requesting their input and support for this upcoming research initiative. Additionally, SSRI notified all non-REACH hospitals of the initiative in a letter describing SE VIEW, SSRI and our research aims. Again, potential community

partners were asked for input and support. **Aim II-B could not be implemented this year without USAMRMC ORT approval of the protocol.**

Aim II-C examines **"Time from Onset of Symptoms to Emergency Department"** (a.k.a. Onset-to-Door time). This aim is also discussed in the previously mentioned protocol, which describes SSRI's intention to obtain Emergency Medical Services (EMS) "run sheets" on all REACH patients that used EMS. With these data, SSRI will determine: (1) fraction of patients who used 911, (2) fraction of calls dispatched as a stroke, and (3) time interval from onset of symptoms to activation of 911 (**see Appendix 17**: Protocol for more details). Early in the grant year, a data request was developed, reviewed and submitted to the S.C. Department of Health and Environmental Control (DHEC) for two NEMISIS II data sets: one identified for REACH patients and one de-identified for all patients (see **Appendix 19**: DHEC Data Request). **While waiting for USAMRMC ORT's approval of the protocol and DHEC's release of the data, we began conducting preliminary analyses of critical time points in the REACH database** for benchmarks (see **Appendix 20**: REACH Presentation - "Assessing Time Benchmarks" for summary data). We also **conducted a literature search** of research related to 911-utilization and community awareness/education programs for stroke (see **Appendix 21** for search references). Knowing that delays that occur prior to the patient arriving at the hospital are the primary contributors to the overall delay in stroke care (leading to worse stroke outcomes and mortality), we began to examine the feasibility of conducting a community-based assessment regarding the public's attitudes/opinions related to this issue with the intent of examining potential interventions. Towards this goal, SSRI contacted colleagues in the Center for Community Health Partnerships, sponsors of the SE VIEW Community Engagement Scholars Program. Together we **created the Community Engaged Assessment to Eliminate Stroke (CEASE) proposal and submitted it to the South Carolina Clinical & Translational Research Institute (SCTR) Pilot Project Program for funding** (see **Appendix 22**: CEASE Proposal). While this first proposal was not funded, SSRI will continue to work with its community partners to seek alternative funding for this exciting new initiative.

Toward **Aim II-D: Use of Alteplase (tPA)**, early analyses indicated that the use of tPA was very low in South Carolina prior to the advent of the REACH MUSC Telemedicine Network (REACH). However **with REACH, tPA use increased** from 12 to 56 during the first year at the six initial REACH sites; a substantial increase (see **Appendix 23**: REACH Poster results). Use of tPA within the REACH network continues to expand as the network grows, with tPA use at REACH sites exceeding 262 since the program's inception (see **Appendix 24**: REACH data). While these REACH figures are impressive, **this aim is focused on comparing use of tPA among non-REACH sites with those that have had REACH** for at least 12 months. To accomplish this aim, **we have requested two data sets** from the S.C. Office of Research and Statistics (ORS). The application for data was submitted to ORS (for details, see **Appendix 25**: Application for Restricted Data) and the unrestricted dataset released. However, **the linked dataset containing restricted data which is needed to make this comparison cannot be released until the research protocol is approved by USAMRMC ORT.**

During FY2011, SSRI was able to complete Aim III by providing targeted stroke and stroke prevention continuing medical education (CME) to health providers in the ROI and beyond. Specifically, the team developed a curriculum of approved CME with input from a designated partner in the ROI. Interviews with key personnel were conducted at this partner site and gaps in knowledge, behavior and outcomes were identified in order to design a CME programs specific to provider needs. Rather than the typical, on-site full-day agenda traditionally offered as CME, a series of three stroke-related programs were developed as requested by this partner and pertinent topics selected. At the same time, SSRI collaborated with the S.C. Area Health Education Center (AHEC) to assess training needs and appropriate use of the South Carolina Health Occupations Outreach Learning System (SCHOOLS) distance learning network. This new tele-training system was tested in February 2011 by transmitting

across the state a Hypertension CME delivered by a nationally known speaker (Dr. Handler). An online evaluation tool was also developed to gage the success of the program *(see **Appendix 26** for evaluation links)*. While results were satisfactory, several opportunities for improvement in the system were discovered and incorporated in the Stroke CME series. Based on this experience**, the SSRI Stroke CME series was presented across this tele-training network.**

FIGURE 5: AHEC SCHOOLS Stroke Training - Enduring Material

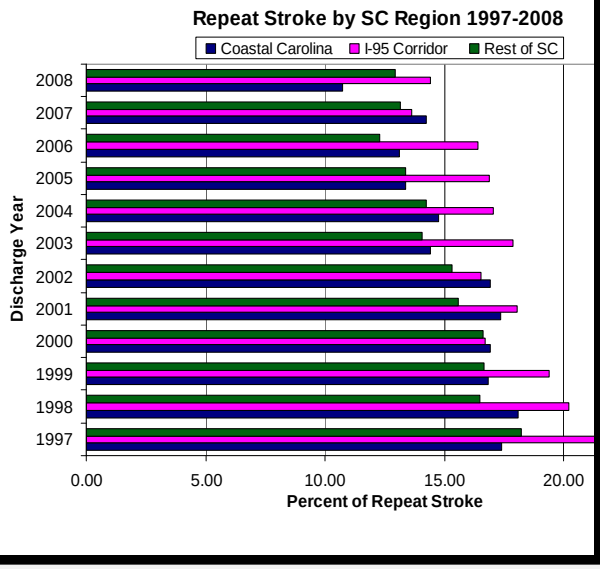
Title	Presenter	Date of Broadcast	Credit Offered
Optimizing Hypertension Control	Dr. Joel Handler	2/15/2011	CME
Diagnosis & Treatment of Stroke: An Application of Tele-medicine	Dr. Robert Adams	4/7/2011	CME
Stroke: Initial Management and Implications for the Emergency Dept.	Dr. Edward Jauch	4/19/2011	CME
Hypertension & Diabetes: Stoke Risks in South Carolina	Dr. Dan Lackland	5/10/2011	CME
To access online, go to: http://scahec.net/schools/library.html			

Thus the CME could be administered in both a tr aditional, "live" audience venue and across the state utilizing the SCHOOLS distance learning technology. This accomplished two important results. First, it increased the breadth of the CME offering by expanding access to the live broadcast to locations throughout the state (see **Appendix 26** for the SCHOOLS site map). Perhaps **more importantly, use of the SCHOOLS system allowed the Stroke CME progr ams to be preserved as enduring materials** . Now any health professional with internet access may receive high quality stroke-related training and corresponding CME credits at their convenience. **This opportunity is now available to military health professionals too. Fig. 5** offers an overview of topics and provides links to access the programs as enduring materials. Further detail regarding this initial stroke CME series, including outcomes data, may be found in **Appendix 26**.

Also under this education aim, the SSRI team has added an important goal to "**Educate the Next Generation"** (Aim III-F). Mentoring young health professionals and student in the area of stroke and stroke risk reduction adds sustainability to these efforts and may positively impact future stroke programs. An outline of some individuals mentored by SSRI leaders during FY2011 is provided In Appendix 1. These individuals also contributed to several of the publications referenced below as the Reportable Outcomes section and were responsible for several poster presentations (see **Appendix 27** and **Appendix 28**).

As discussed, development of **Aim IV: Data Repository (a.k.a. Epidemiology Core)** evolved when early efforts related to Aim I demonstrated: (1) a need to develop Epidemiology Profiles depicting the ROI and (2) the importance of acquiring and maintaining standardized data sets as a common resource for all SE VIEW cores. As a subset of SSRI, the Epidemiology group was established under the leadership of SSRI Investigator, Daniel Lackland, DrPH. As noted, this group completed the Aim I by defining and characterizing the ROI and presenting these findings to the SE VIEW Team (see **Appendix 13**). The group also began to collect a variety of data sets including emergency room, hospital, socioeconomic status (SES) and census data. The team began these data by ROI, validating the assumption these regions suffer from greater health disparities and reporting these findings to the other SE VIEW cores as requested. An interesting sample of the types of stroke data found in these early summary reports is provided as **Fig. 6,** which shows a history of consistently higher repeat stroke among hospitalized patient residing in the I-95 Corridor as compared to the rest of S.C.

FIGURE 6: Epidemiology Summary Report (sample table)



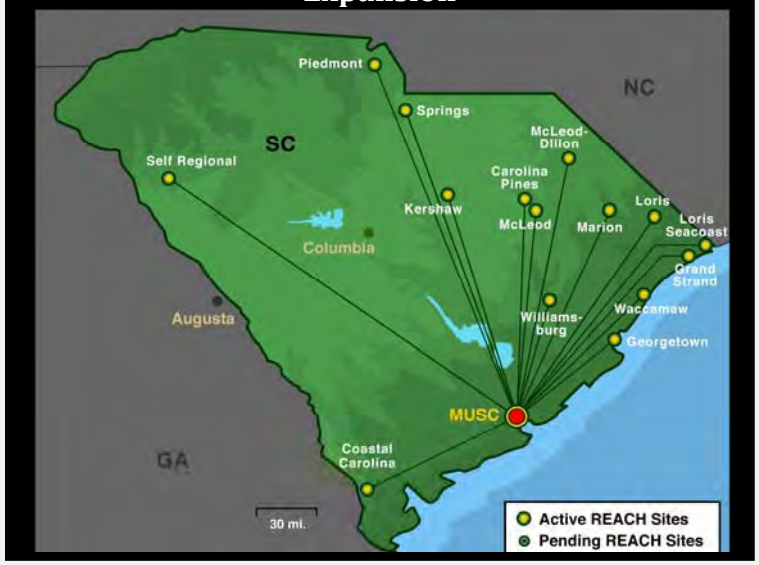
Aim V: IRB/ORS refers to the design, development and submission of the first SSRI Protocol, which contained a key ORS data request (see **Appendix 17**: Protocol and **Appendix 25**: ORS Request for Restricted Data). As discussed earlier, the SSRI Research Protocol was approved by the IRB and submitted to USAMRMC ORT. All USAMRMC ORT concerns were addressed. Final approval by USAMRMC ORT has not been received. **This aim will be completed upon receipt of USAMRMC ORT approval of the protocol** and will be addressed in future reports under the new Aim I: SSRI Program Administration.

Aim VI: Stroke Care focuses on an SSRI core responsibility, which is "to address these (stroke) issues by enhancing the REACH telemedicine system." REACH MUSC is not just a technology, but a robust partnership between South Carolina's rural and community hospitals and the MUSC Stroke Center; one of only nine JCAHO-designated Primary Stroke Center (PSC) and the only Comprehensive Stroke Center in the state. **SSRI is focusing on three methods of improving access to care by enhancing REACH: (A) site expansion, (B) program expansion and (C) patient care/follow-up.**

Aim VI-A: Site expansion refers to a continued expansion of geographic access to expert stroke care achieved by adding sites to the existing REACH Tele-Stroke Network. In FY2011, this aim was **accomplished by adding six new partner sites** (see **Appendix 16** for site listing).

The REACH Tele-Stroke Network currently contains 15 hospitals with 2,482 hospital beds and 471,875 emergency room visits per year (see **Fig. 7** for map). Since its inception in 2008, this network has facilitated over 1,250 consultations, with 262 receiving tPA (see **Appendix 24**: REACH data). Data collected from these consultations provides a wealth of materials used in much of this SSRI research. **Appendix 20**: REACH Presentation and **Appendix 23**: REACH Poster provide excellent overviews of the REACH program, the network, its technologies and early findings demonstrating the viability of this telemedicine facilitated network for urgent stroke care.

FIGURE 7:
FY2011 REACH MUSC Tele-Stroke Network Expansion



Toward **Aim VI-B: Program Expansion**, a REACH MUSC team led by SSRI Investigator Dr. Robert Adams collaborated with several other programs who were interested in exploring the feasibility of expanding REACH into other specialty areas (e.g. cancer, Alzheimer's). The team also providing consultative services to others interested in telemedicine but not necessarily in REACH (see **Appendix 16**, Aim VI-B for listing). In FY2011, the Critical Care Excellence in Sepsis and Trauma **(CREST) Program became the first non-stroke initiative to successfully expand the REACH platfo rm into another specialty**; adding four sites to the MUSC REACH Telemedicine Network this year (see SE VIEW CREST Annual Report for details). The REACH team supported CREST as it evolved; holding regular collaborative meetings and sharing materials. In March 2011, the first combination CREST/REACH site was established at Williamsburg Regional Hospital, with REACH staff offering support at the initial sepsis-training program. Additionally, the SSRI Team began to examine the feasibility of expansion into a primary care setting and began to develop a model for REACH Primary Care (Aim VI-B3). **An additional REACH cart w as ordered in FY2011 to supp ort this initiative, which has been dubbed REACH-PC (primary care).**

An additional aspect of this stroke care initiative focuses on **patient care/follow-up (Aim VI-C). Tw o programs were enacted this year to address this aim**. First, the **MUSC ECareNet Physician Portal** telehealth program was implemented to allow physicians and hospital staff access to their referred patients' medical records at MUSC; offering continuity of care directly from their community hospital. REACH staff collaborated with the MUSC Physician Liaison Program to introduce the E-Care Net Viewer/Oacis program to our REACH partner sites. The Portal was first introduced to each *new* REACH sites during that site's initial implementation training program, at which time their providers learned how to register for OASIS access. Additionally, the REACH staff provided liaisons with contacts at all *existing* REACH sites so that they might further dissemination program information and registration providers at these partner sites. The second effort supporting Aim IV-C was development of a **multimedia program which seeks to "Tell the Story" of stroke** by presenting patient and family experiences with REACH and the MUSC Stroke Center. This serves both as a means of documenting

qualitative patient care information and demonstrating the "so what" of stroke care, for as we know "It's all about the People" (see **Appendix 23**: REACH Poster). For this purpose, an audio-video compilation of patient and family stories was developed and is now posted online, as well as available in DVD form for presentations (for online links, see **Appendix 29**: Telling the Story of Stroke). An ongoing process is now underway to continually collect and disseminate these patient stories depicting actual stroke care experiences.

Finally, listed this year as **Aim VII: Program Administration** provided the framework needed to maintain a strong, multidisciplinary team able to support SSRI program aims in a collaborative manner. This aim was discussed previously (see Aim I above) and **will be listed next year as Aim I** . The goals completed under this **aim include: (A) team building and program coordination; (B) interfacing and collaborating with potential partners on an ongoing basis and as appropriate; (C) conducting site analyses of potential external partners, as needed; and (D) promoting the aims of SE VIEW and SSRI whenever appropriate** . **Appendix 16** offers detailed accomplishments under each of these goals, while **Appendix 16** outlines the team's promotional activities. Of importance has been the inclusion of several nationally recognized stroke researchers as team members and guests during FY2011. Highlights include: Charles Ellis, PhD from the Center for Health Disparities Research (Dr. Ellis is our newest team member) and guest Lewis Morgenstern, MD - Director of the Stroke Program and Professor of Epidemiology at the University of Michigan who serves on several NIH-supported community-based stroke research initiatives including: ASPIRE, BASIC, INSTINCT, KIDS and SHARE (for research citations, see **Appendix 21**: Literature Search). **Again, the inclusion of these highly regarded research professional along with our own multidisciplinary group containing nationally and internally recognized stroke professionals is building a SSRI Team poised to support SE VIEW's vision of "developing a nationally recognized multidisciplinary, inter-professional team of researchers, educators, outreach professionals and laypersons to eliminate health disparities."**

B2b. **<u>Heart Health – Preventive Cardiology Research Center</u>**

Director: Melissa Henshaw, MD, Associate Dean for Advocacy and Advancement; Assistant Professor of Pediatric Cardiology; Medical Director of Heart Health

Goals: Analyze resource allocation patterns and prioritize areas of need to deliver preventive cardiology and weight management services to medically underserved children; streamline data management efforts to facilitate flow of information among providers; develop data analysis methods to assess outcomes across cardiovascular risk parameters and co-morbid conditions; extend volunteer involvement and community engagement.

Distinguishing Characteristics: A collaborative network of pediatric heart care providers, working with MUSC's Children's Heart Center, form a unique platform for outreach to rural and other medically underserved children and families with known cardiovascular risk factors such as hypertension, pre-diabetes and dyslipidemia.

Summary of Activities: Developed core infrastructure and dedicated resources to create the Preventive Cardiology Research Center within the MUSC Children's Heart Center; initiated process to obtain Academic Center of Excellence designation for pediatric obesity, including Heart Health (children) and the Lean Team (adolescents); enhanced the Pediatric Metabolic Syndrome Study as a joint effort of the SC Clinical and Translational Research Institute (SCTR) and SEVIEW.

The Children's Heart Program of South Carolina (CHP-SC) is a unique statewide collaborative of pediatric heart care providers, working in concert to provide optimal, integrated care to children and adolescents with congenital or acquired cardiovascular disease. CHP-SC is directed through the MUSC Children's Heart Center, which provides a full range of heart care services in one central facility. CHP-SC also coordinates a statewide network of regional pediatric cardiology practices and rural outreach

clinics supported by telemedicine capabilities. Heart Health is the preventive cardiology and weight management program of CHP-SC. Created by Melissa Henshaw, MD, Heart Health serves the complex health care needs of obese children and adolescents with cardiovascular risk factors such as hypertension, pre-diabetes, and dyslipidemia. Through a series of medical evaluations, one-on-one nutrition and behavioral counseling sessions, group education classes, fitness sessions, and other related activities, Heart Health teaches families how to improve nutrition, activity, and lifestyle behaviors in order to manage weight and improve cardiovascular risk. Heart Health is a comprehensive care program designed to address the root causes of cardiovascular health disparities and promote health equity and wellness through the four core domains of SE VIEW - prevention, education, partnership, and research.

Heart Health is a comprehensive care program designed to address the root causes of cardiovascular health disparities through a multi-faceted, multi-disciplinary approach. The primary objective of Heart Health is to provide a comprehensive range of preventive cardiology and weight management services for patients ages 2 through 21 who are affected by obesity and cardiovascular disease risk factors such as hypertension, pre-diabetes, and dyslipidemia. Through a series of medical evaluations, one-on-one nutrition and behavioral counseling sessions, group education classes, fitness sessions, and other related activities, Heart Health teaches families how to improve nutrition, activity, and lifestyle behaviors in order to manage weight and improve cardiovascular risk. In project year one, Heart Health exceeded its core programmatic goal of 10-15% growth, expanding operations by 36%. The program functioned at 97%, 96%, 107%, and 137% of projected maximum capacity for the four quarters, with an overall functional program capacity of 109% projected maximum for the year. From the first to the fourth quarter, the number of new patients increased 2.4fold, return visits increased 1.2fold, group visits increased 2.4fold, and fitness visits increased 1.3fold. Volunteers contributed 1,169 hours of effort to the fitness program during the year, averaging 22.5 hours per week. New educational programs are also being developed and coordinated through the program's Preventive Cardiology Research Center to provide much-needed pipeline training in pediatric cardiovascular health disparities, including a summer research program for the MUSC Colleges of Medicine and Graduate Studies; a summer externship for The Citadel's masters program in health, exercise, and sports studies; a one-year nutrition research practicum for the MUSC dietetic internship; a one-year residency position for the MUSC College of Nursing's doctoral program in nursing practice; and a three-year T32 research project for a pediatric cardiology fellow.

PREVENTION:

In project year one, Heart Health exceeded its core programmatic goal of 10-15% growth, expanding operations by 36%. The program functioned at 97%, 96%, 107%, and 137% of projected maximum capacity for the four quarters, with an overall functional program capacity of 109% projected maximum for the year. From the first to the fourth quarter, the number of new patients increased 2.4fold, return visits increased 1.2fold, group visits increased 2.4fold, and fitness visits increased 1.3fold.

Table 5. Heart Health Evaluation Plan

Evaluation Plan Table	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year
New Patient Visits	26	29	45	63	163
Return Patient Visits	153	164	142	183	642
Clinic "No Shows"	51	62	76	114	303
Group Session Attendees	44	70	82	105	301
Fitness Session Attendees	143	128	130	189	590
Clinic Hours	154	165	151	175	645
Group Session Hours	12	12	11	13	48
Fitness Session Hours	282	237	290	360	1,169
Care Unit Summary	505	500	559	711	2,275

Comments from a Heart Health Participant: "I have been a member of Heart Health for a year now. I really enjoy my visits and I love when I see changes. Every time that I go to Heart Health I do not always lose weight, but it still gives me motivation to keep on the right track. When I first started weight management, I weighed 293 pounds. Now I am down to 269 pounds, and I am still working on losing weight. I am starting to feel better and it really feels good not to be at that weight anymore. I was able to make changes by changing what I eat and drink. I do exercises like walking and lifting arm weights. I stopped eating fried foods, and now I eat baked foods and healthy snacks. They might not have tasted good before, but now I love them. During my year at Heart Health I have had a lot of difficulties. I sometimes felt like not going to Heart Health - I felt like giving up. But now I see that I have made a lot of progress, and I say to myself that it is going to get easier after a while, and it is. Walking is easy for me now. I walk at fast paces, and I feel like I have more energy through the day. I had very little energy when I started going to Heart Health, and now I really enjoy myself. I always look forward to a new lesson every time that I go to Heart Health. I really appreciate all of the help and support, and I have to say thank you for motivating me to stay on track. I am very happy that I am in the Heart Health program, because without it I would not have made any progress on my own."

EDUCATION:

Heart Health provides individual and group education and counseling covering a broad range of topics that address key aspects of behavior, exercise, and nutrition. Sessions include motivation, stress management, triggers versus cravings, eating cues and emotional eating, every step counts, let's get movin', exercise monopoly, parents as coaches, dining out strategies, portion control, label reading, and heart healthy cooking, among many more topics. Multimedia and social networking resources are also employed to facilitate patient education and encourage program adherence, including MUSC website podcasts, newsletter archives, and external links; Facebook postings; and Twitter Healthy Bytes.

The ART of Healthy Cooking, a collection of 500 recipes with nutritional analyses performed by Heart Health's registered dietitian, was a top ten national finalist for Morris Press in 2010. Program materials including ***Trim Kids*** manuals, exercise bands, pedometers, food scales, nutrition guides, and other key support materials are provided at no charge to participants.

Comments from an MUSC Dietetic Intern: "I was recently teaching a second grade class at James Simmons Elementary School for Junior Doctors of Health. When I asked what the kids could tell me about fruits and vegetables, one of the little boys told me he knows all about fruits and vegetables because he is part of Heart Health. He then went on to tell me he eats fruits and vegetables at every meal. As the other kids told me what kinds of fruits and vegetables they eat, he would give his own feedback. For example, one child said he only eats broccoli when there's cheese on it. Your patient spoke up and told him, 'You know you should try it without cheese because it's really good on its own and healthier for you.' I just couldn't believe the knowledge he retained and seemed to enjoy sharing with his classmates! I thought you would like to hear about how Heart Health extends beyond their sessions with you and really makes an impact in their lives."

PARTNERSHIP:

Programmatic synergies have been explored to facilitate strategic partnerships within and beyond the constituent SE VIEW members. Existing partnership efforts with the Lean Team, which refers obese children and adolescents within the county school system to Heart Health for treatment, have been expanded with plans to create a shared registered dietitian position during project year two. Patients and family members ages 2 to 21 who are served by other SE VIEW projects are also encouraged to enroll in Heart Health for the treatment of obesity and associated metabolic syndrome characteristics (pre-diabetes, dyslipidemia, and hypertension).

In January 2011, the MUSC Center for Promotion of Healthy Lifestyles in Children and Families was developed. This institutional entity will foster Academic Center of Excellence designation in pediatric obesity, providing needed administrative support for the clinical Heart Health program as well as the educational service component of the Lean Team.

Heart Health's external partnership with The Citadel is a novel and cost-effective model for providing fitness sessions at no charge to participants in an environment that permits supervised, hands-on training for MUSC medical and physical therapy students, as well as students in The Citadel's masters program for health, exercise, and sports studies. In project year one, volunteers contributed 1,169 hours of effort to the Heart Health fitness program, averaging 22.5 hours per week on-site at The Citadel's comprehensive Deas Gym facility.

Comments from a Citadel Cadet and Heart Health Volunteer: "My mother, a fitness instructor with the Marine Corps, instilled in me the desire to 'give it my all' when it comes to working out. I follow this mantra when working with the Heart Health kids, too. I love volunteering with Heart Health because it allows me to encourage proper exercise and nutrition habits, and also because I get to be a kid for an hour every week!"

RESEARCH:

During year two of the SE VIEW project, phase one of the Pediatric Metabolic Syndrome Study, a comprehensive metabolic assessment protocol sponsored by the South Carolina Clinical and Translational Research Institute (SCTR), will be completed, providing preliminary data from 240 subjects to support the development of phase two, which will be implemented during project years two through five with dual support from SCTR and SE VIEW, pending approval. This will allow both SCTR and SE VIEW to build upon existing strengths and collaborate more actively toward their mutual core programmatic goals of identifying the determinants and eradicating the precipitants of health disparities in cardiovascular disease.

New educational programs are being developed and coordinated for implementation beginning in project year two through the program's Preventive Cardiology Research Center. These programs will provide much-needed pipeline training in pediatric cardiovascular health disparities, including a summer research program for the MUSC Colleges of Medicine and Graduate Studies; a summer externship for The Citadel's masters program in health, exercise, and sports studies; a one-year nutrition research practicum for the MUSC dietetic internship; a one-year residency position for the MUSC College of Nursing's doctoral program in nursing practice; and a three-year T32 research project for a pediatric cardiology fellow.

Comments from an MUSC Medical Student and Heart Health Volunteer: "I have to say that I love being a part of the Heart Health program. I have always been an active individual and enjoy the benefits of staying fit. Heart Health has been the favorite part of my week since I started volunteering, because it gives me the chance to share the joy I find in keeping my mind and body healthy with the kids. I hope I can be as much of an encouragement to the kids as they are to me, as they work hard to pursue their fitness goals. Heart Health is giving me the opportunity to help change lives."

B2c. SC TeleSupport: Diabetes Management Initiative (Effectiveness of Technology-Assisted Case Management in Low Income Adults with Type 2 Diabetes

Director: Leonard E. Egede, MD, MS, Professor, Department of Medicine

Goals: Long-term: Develop a sustainable system of diabetes management to help low income patients achieve and maintain goals within established treatment guidelines regardless of geographic location. Immediate: Employ info tech to improve patient-provider communications and patient adherence to

prescribed therapy.

Distinguishing Characteristics: Widespread penetration of cell phone technology presents an opportunity to employ a technology familiar to most, regardless of socioeconomic status or location. This project will conduct a randomized clinical trial project using CONFIDANT, an inexpensive, off-the-shelf cell phone technology whereby a person/caregiver and a provider can communicate data accurately, and the innovative FORA system, an inexpensive, off-the-shelf health technology with a 2-in-1 Blood Glucose and Blood Pressure monitor, coupled with nurse case management to optimize diabetes care for low income, rural adults with type 2 diabetes. The target population will be low-income patients served in Federally Qualified Health Care Centers (FQHCs) with poorly controlled T2DM residing in coastal South Carolina.

Summary of Activities: Developed rapport and formal agreements with FQHCs; collaborated with clinic physicians to generate a protocol conducive to the needs of their patients; established algorithms for titration of blood sugar and blood pressure medications; initiated IRB approval processes; identified need for additional full-time research personnel due to increased sample size needed to power the study.

The long-term goal is to develop a practical and sustainable system of diabetes management that will help low income patients achieve and maintain goals within established treatment guidelines regardless of geographic location. This randomized clinical trial will employ the innovative FORA system, an inexpensive, off-the-shelf, state-of-the-art technology comprised of a 2-in-1 Blood Glucose and Blood Pressure monitor, coupled with nurse case management to optimize diabetes care for low income, rural adults with type 2 diabetes. The primary outcome will be hemoglobin A1c (HbA1c) at 6 months post-randomization while the secondary outcomes will be blood pressure control and quality of life at 6 months post-randomization.

Procedural Issues:

- MUSC IRB
  - After initial submission, several revisions were requested until we received approval contingent upon executing a Business Associates Agreement with the Federally Qualified Health Center.

- Franklin C. Fetter Family Health Center, Inc; Federally Qualified Health Center
  - The nurse case manager is in the process of establishing procedures and guidelines that must be followed at the health center. She has had to complete an orientation specific to the community center site. She has made efforts to meet the staff, attend staff meetings, and become acclimated to the health center aesthetics.

- USAMRMC ORT
  - MUSC IRB approved materials were submitted on April 20, 2011; approval pending with USAMRMC ORT.
- No reportable research accomplishments or outcomes available at this time; waiting on USAMRMC ORT approval; upon receiving approval, we will be able to proceed with recruitment, enrollment and randomization of participants into the project.

B2d. <u>Tele-Critical Care to Reduce Rural Health Disparities</u>

Director: Dee Ford, MD, Assistant Professor of Pulmonary and Critical Care Medicine

Goal: Improve management of sepsis by engaging rural hospitals in a telemedicine network.

Distinguishing Characteristics: Demonstrated ability to develop trusting, mutually respectful associations prerequisite to engaging rural community hospitals in a telemedicine network. Partnerships require <u>both</u> concurrence of hospital administration <u>and</u> agreement of senior community practitioners.

Summary of Activities: Initiated necessary components such as Federal Wide Assurance at community hospital partner sites and credentialing of participating physicians; identified a region with much higher age-adjusted sepsis mortality than other SE VIEW areas; initiated design and development of assessment plan to evaluate the epidemiologic and health services characteristics hypothesized to be specifically relevant to sepsis mortality preparatory to developing interventions.

Critical care is a specialty devoted to the evaluation and management of patients with immediately life threatening organ system failure(s). For many diagnoses, mortality and morbidity is reduced through the use of specialist directed care and by receiving care at higher volume centers.[5] Several specialties within critical care (trauma surgery and neonatology) have demonstrated that patient outcomes are improved via care at higher volume centers and therefore have established tiered systems of regionalization so that these patient populations can access the needed services and specialists expeditiously.[6-9] Similarly, outcomes among the most common medical diagnoses leading to critical illness - sepsis and respiratory failure requiring mechanical ventilation - are improved through care at higher volume centers and by intensivist directed management.[10-15] Thus, professional societies have begun calling for a tiered system of regionalization for patients suffering from medical critical illnesses.[16,17] However, important theoretical and practical barriers exist before this can be accomplished. Barriers include a desire among hospitals and providers at lower volume hospitals to retain their patients, lack of capacity at higher volume hospitals to accept all potentially appropriate patient transfers, lack of intensivist physician staff, lack of ICU ancillary staff, and lack of agreed upon criteria for designation of different levels of care and patient selection criteria for transfer.[18, 19] These and other barriers are likely to be more significant in rural and medically underserved areas.[20] Thus, it is generally conceded that in order to globally improve outcomes for critically ill patients, a combination of inter-institutional collaboration, clinician education, quality improvement efforts, transfer of appropriate patients to higher volume hospitals, and other creative solutions such as tele-medicine programs will be necessary.

The SE VIEW program in tele-critical care consists of two phases. Phase one is underway and is an evaluation of the baseline patterns of inter-institutional transfers among critically ill adult patients in South Carolina (SC) with sepsis and respiratory failure as well as associated variation in patient outcomes. Covariates of particular interest include the effect of being from or cared for in a medically underserved community, race-associated variation, and the implications of staying in-place versus referral to a larger hospital as well as timing of inter-hospital transfers. Phase two will develop and test strategic interventions guided by knowledge gained from phase one. These interventions will include:

- Developing inter-institutional partnerships for sharing patient safety and quality improvement data and strategies
- Clinician education with respect to key aspects of evaluation and management for sepsis and respiratory failure
- Tele-medicine collaborations between the Medical University of South Carolina (MUSC) and moderate volume hospitals to foster the option of critically ill patients remaining in-place with specialist expertise backup
- Developing and testing criteria for patient transfer to large volume hospitals

A comprehensive description of SE VIEW tele-critical care phase one is provided below. The investigation is pending MUSC Institutional Review Board approval. SE VIEW tele-critical care will address the following hypotheses and specific aims:

Hypotheses and Specific Aims

- Hypothesis 1: Substantial variation will be observed in the care transitions and timing of care transitions between hospitals for patients with sepsis and respiratory failure. Patients transferred

between hospitals early in their illness will have different outcomes compared to those transferred later in their illness course and to those not transferred.

- *Specific aim 1*: Use hospital data obtained from the SC Office of Research and Statistics to characterize the inter-hospital care transitions for patients with sepsis and respiratory failure and compare outcomes of patients transferred to patients remaining in-place.
- *Specific aim 2*: Among patients experiencing an inter-hospital care transition, determine the relationship of transfer timing on outcomes.
- *Specific aim 3*: Use observations from Aims 1 and 2 to ascertain initial criteria for patient triage and transfer to large volume hospitals for sepsis and respiratory failure.

- Hypothesis 2: Multi-modality, multi-level approaches will improve outcomes for patients with sepsis and respiratory failure. The best approach(s) within a given hospital will reflect local resources and processes of care, organizational culture, strategic priorities and readiness to innovate.
  - *Specific Aim 1*: Expand the collaboration between MUSC and current CREST sites to incorporate additional quality improvement efforts, educational outreach, and clinical consultation.
  - *Specific Aim 2*: Develop triage criteria and protocols for systematic transitions in care for patients with sepsis and respiratory failure between low, moderate, and high volume hospitals.
  - *Specific Aim 3*: Establish the initial feasible framework for regionalization of adult medical critical care for SC.

Methods

- Design Overview

  The SE VIEW tele-critical care program will develop a conceptual model for regionalization of adult, medical critical care for patients with sepsis and respiratory failure. Phase one will be a population-based, retrospective cohort study using hospital-identified data (see Appendix for request submitted to the SC Office of Research and Statistics) to conduct an evaluation of outcomes of care for these diagnoses in relation to pre-specified patient covariates, hospital covariates, and county covariates. This will represent the first investigation of this type and will provide meaningful insights into details for phase two development and implementation.

  Phase two will be a prospective, multi-intervention study best characterized as a demonstration project for regionalization of medical critical care with a before-after study design. Based on patient outcomes, SC hospitals will fall into one of three categories with respect to sepsis and respiratory failure: 1) hospitals appropriate for patients to remain in-place; 2) hospitals that may be appropriate for patients to remain in-place but that may benefit from strategic partnerships with hospitals in the first category including data sharing, quality improvement initiatives, and tele-medicine consultations; and 3) hospitals that should align with larger centers for early, initial evaluation using tele-medicine technology and expedited transfers to a type 1 or 2 hospital. Hospitals selected for phase two will include those participating in the ongoing CREST project and at least two other hospitals chosen to fill potential gaps in hospital-types.

- Preliminary Studies
  - Rural disparities associated with critical illness
    - Rural patients are less likely to have onsite access to specialist care for sepsis and acute respiratory failure for several reasons. First, there is a nation-wide shortage of intensivists and other critical care staff.[21] Small, rural communities lack the economies of scale to support such resource intense services and if a community has these specialties, there is often not around the clock coverage necessary for best quality care for these conditions.[21] Additionally, sepsis and acute respiratory

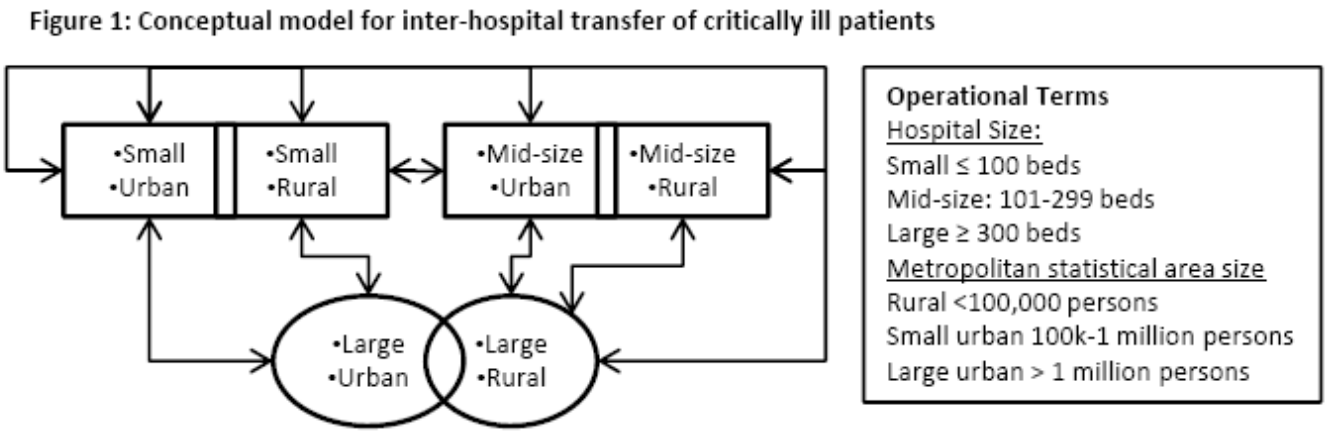
failure patients require immediate availability of resources such as multidisciplinary ICU staff, advanced radiological facilities, and multi-specialist consultation services generally unavailable in small communities and their hospitals. Finally is location and distance including delays in entry to the Emergency Medical System network, longer travel times to definitive care facilities and delays in definitive care delivery. Inter-hospital transfer may be limited both by severity of patient illness, acute care and ICU bed shortages in larger centers. Lastly, the scarcity of hospital ICU beds increases the importance of initiating transfer for patients who will maximally benefit from referral to more resourced hospitals.[22, 23]

- B. 2 Critical Care Excellence in Sepsis and Trauma (CREST)
  - CREST is an NIH funded investigation (5RC1MD004405-02) studying the barriers, enablers, and benefits of collaborations between MUSC and rural SC hospitals to improve the care and outcomes for patients in rural communities with sepsis and trauma. Currently eighteen months into operation, CREST has enrolled four rural, SC hospitals and completed all necessary administrative and regulatory requirements for the inter-institutional clinical and research collaborations (e.g. physician credentialing, FWA certification for partner sites, and memorandum of agreements). Additionally, the educational outreach programs have been developed, implemented, and evaluated. Finally, the technical platform for tele-medicine consultation has been developed, installed, and is in active use by MUSC and CREST partner sites. To date, CREST physicians have provided 20 consultations for sepsis with 80% transferred from partner rural hospitals to MUSC. The SE VIEW program in tele-critical care will focus on medical causes of critical illness rather than traumatic injury as the model for regionalization in trauma is well established.

- <u>Detailed Methods</u>
  - Phase One
    - Data Collection: An application has been filed by Dr. Kit Simpson (SE VIEW co-investigator) with the SC Office of Research Statistics requesting hospital-identified data for all SC patients with a diagnosis of sepsis or respiratory failure. To identify patients with sepsis we have requested a dataset consisting of patients with the following ICD-9 codes: 995.91, 995.92, 799.1x, 785.52, 584.xx, 570.xx, 518.81, 518.82, 518.83, 518.84, 478.52, 359.81, 357.82, 348.31, 286.6x. We will focus our investigation in respiratory failure on patients with respiratory failure requiring mechanical ventilation for more than 12 hours as this population has been convincingly shown to improve outcomes when cared for at higher volume hospitals. Specifically, we have requested diagnoses codes for adult respiratory distress syndrome (ARDS), COPD, asthma, pneumonia, pulmonary embolus, heart failure and a procedure code indicating mechanical ventilation for more than 12 hours (MV). The MV code is 96.72, the PD codes are: 490.xx-496.xx, 402.xx, 428.xx, 480.xx-487.xx, 514.xx, 415.xx, 449.xx. Hospital identifiers are designated as restricted information so we will utilize strict confidentiality measures to protect both hospitals' and patients' privacy.
  - Phase One Measures
    - Care transitions: Inter-hospital transfers. Although inter-hospital transfers of critically ill patients are common, it's unknown whether or how this practice impacts patient or hospital financial outcomes. What has been described is logarithmic variation in the practice of inter-hospital transfers for Medicare beneficiaries.[24] Although a general trend was found that among critically ill

patients who were transferred, transfers tended to be to hospitals with more services available. A novel aspect of SE VIEW Phase One is that SE VIEW will target specific medical critical illnesses rather than the entire population of ICU patients. Thus, care transitions will be designated as none, early, intermediate, or late from the perspective of the clinical conditions sepsis and respiratory failure requiring mechanical ventilation. A conceptual model of inter-hospital transfers is presented below in **Fig. 8**. Inter-hospital transfers tend to be unidirectional and it is expected that most transfers will be from smaller, less resourced hospitals and towards larger, more resourced hospitals; however, arrows shown are bidirectional as conceptually the flow could be in two directions.

Figure 8. Conceptual Model for Inter-hospital Transfer of Critically Ill Patients



- Outcome Measures (**Table 6**)
  - Outcome measures (**Table 6**)

    Outcome measures include survival, length of stay, duration of mechanical ventilation, and discharge status. We will also identify potential quality improvement opportunities by investigating rates of specific hospital acquired complications. Care transitions are a primary focus of Phase One and thus will be evaluated with respect to a) whether a care transition occurs and b) at what time during the course of illness a care transition occurs. Finally, the economic impact will be evaluated from several perspectives including a global assessment, patients' perspectives, and hospitals' perspectives
- Patient covariates (**Table 6**)
  - Standard patient demographics will be obtained (e.g. age, sex, etc.). In order to adjust for variation in comorbid conditions the Charlson score will be used. Other covariates that will be included are hospital length of stay prior to ICU admission and point of origin prior to hospitalization (e.g. home, nursing home, etc.). Insurance status and employment status will be obtained if available. Median income by zip code will be used as a surrogate for socio-economic status.
- Hospital covariates (**Table 6**)
  - Variation associated with differences between hospitals is a significant component to Hypothesis 1. Additionally, as with many diagnoses, outcomes for sepsis and respiratory failure are better for patients cared for at higher volume hospitals. Thus, hospitals will be categorized by size, volume, ICU services, teaching status, and medical school affiliation.
- County covariates (**Table 6**)

- The issue of rural health disparities is of particular importance in SE VIEW Phase One and thus county covariates will also be considered including outcomes associated with rural versus urban communities, medical service status (e.g. medically underserved versus not), proportion of population living below the federal poverty level, and proportion of the population that is from an underrepresented race/ethnic group.

- Phase One Database Development
  - The data set, when delivered by the SC Office of Statistics will have the hospital and many patient variables that will have been defined in the standard manner for SC hospital discharge data. We will define and calculate the hospital volume variables and the continuous and categorical variables that depend on combinations of categorical classifying variables, such as ICD-9 codes. The characteristics of the variables will be examined using frequency distributions for categorical variable and univariate analysis for continuous variables. At present, we do not see a need to merge additional data on to the data set, and our data application specifically prohibits us from merging the data onto another data set. The data will not contain patient-level protected health information. However, they will have encrypted hospital identifiers. Dr. Simpson will be the only research team member who will have access to the data with the intact hospital identifiers. She will construct the hospital-specific variables and de-identify the institutions before sharing any results with the rest of the team. The original data will be stored in a locked file cabinet in Dr. Simpson's office. All analytical data sets will be free if PHI and institutional identifiers. The analytical data set will be stored on in a password-protected location on the College of Health Professions' research network behind the MUSC firewall.
- Phase One Data Analysis
  - First, we will perform a descriptive analysis that communicates the variations observed in the data. We will use SAS version 9.1 or later for all analyses. Continuous data will be described by their mean, median, range and standard deviation (SD). Categorical data will be described by frequencies or percentages. Differences between groups will be compared using t-tests, chi square test and/or non-parametric tests as appropriate for the data. Second, we will use univariable and multivariable analysis to compare outcomes for different groups, and multivariable OLS or logistic regression analyses to test the study hypotheses. Time to transfer may be examined using survival analysis, if the data will allow us to adequately measure hours from admission to transfer. We will perform economic analyses using descriptive data on charges and estimated costs, as well as multivariable analyses to test the economic differences (charges, costs, length of stay) between the groups. Finally, we may use multivariable regression modeling with a gamma transformation for the cost data to account for any non-normal distribution in these types of data. We recognize that the data may be correlated within each hospital. We will examine the potential effects of this correlation by controlling for the institution using a fixed effects approach.

Table 6: Outcome measures and covariates by category (patient, hospital, and county)

Outcome measures	Patient covariates	Hospital covariates	County covariates
Survival • ICU survival • Hospital survival	Demographics • Age • Sex • Race • Marital status	Annual mech vent volume: • very low volume (<150) • low volume (151–275) • intermediate volume (276–400) • high volume (>400)	Metropolitan statistical area size • large urban (more than 1 million persons) • small urban (100,000 to 1 million persons) • rural (fewer than 100,000 persons)
Length of stay (LOS) • ICU LOS • hospital LOS	Pre-ICU LOS Co-morbid disease burden (Charlson score)		
Days of mechanical ventilation	Sepsis dx • sepsis • septic shock • severe sepsis • any of above + mech vent	Annual sepsis volume • sepsis • septic shock • severe sepsis • any of above + mech vent	Medical services status • fully medically underserved • partially medically underserved
Hospital complications (DVT; HAP or VAP; CLBSI; MRSA acquisition; VRE acquisition; C. difficile infection)	Mech vent > 12 hours and/or > 99 hours • non-cardiac • non-surgical • (based on admitting Dx algorithem)	Hospital bed number • </=100 • 101 – 299 • >/=300	Percent population living below federal poverty levels
Discharge status • Home • Hospice • Rehabilitation • Chronic care facility	Insurance status • Medicare • Medicaid • commercial • uninsured	ICU beds ICU types (med-surg, medical, cardiac, etc.)	Percent population under-represented minority
Care transitions • none • Hours to transition (continuous) • early (below 33 percentile) • intermediate • late (above 67 percentile)	Admission origin • home • chronic care facility		
Economic • per patient • per hospital • overall for sub-groups	Economic Quintile of household income in SC for patient's zipcode	Economic • lost revenue • increased expenditures	
	Median Income by zip code	Urban/rural	
	County • residence • initial treating • transferred treating	Teaching/non-teaching Medical School Affiliation	

B3. Objective B3: Establish a Community Partnerships and Outreach Program to reduce health disparities.

Program initiatives will provide the foundation for integrated efforts to address chronic disease burden in populations that could provide talented recruits for military service. These initiatives also will develop robust dissemination strategies to maximize adoption of program recommendations. This objective includes six initiatives.

B3a. Lean Team Initiative

Director: Janice Key, MD, Professor and Director of Adolescent Medicine

Goal: Prevent and treat childhood obesity through effective school-based partnerships at the high school level

Distinguishing Characteristics: The Lean Team initiative is based on an active program providing nutrition education and skills training for students at Burke High School, a Title 1 school with >95% African-American students. The program targets students, teachers and families. Through SE VIEW, the initiative is extending to multiple schools with an overarching goal of prevention and treatment of childhood obesity through individual, family and community change.

Summary of Activities: Program components include individual assessment and counseling, social network support of healthy behavior changes, classroom education, school wellness councils, changes in the built environment, web-based resources for teachers, and community activities. Facebook and Twitter were launched, and the Lean Team website enhanced (www.musc.edu/leanteam).[25] School wellness councils are being strengthened via the "Adopt-A-School" outreach to local physicians. Site visits were made to three high schools for discussions with J-ROTC instructors. The Lean Team works with J-ROTC programs at middle and high school levels respectively, and are partners in a new Academic Center of Excellence in Pediatric Obesity at MUSC.

The Lean Team is a school and community based wellness initiative aimed at the prevention and treatment of childhood obesity through individual, family and community change. Through SE VIEW, we are improving the nutrition and fitness behaviors of JROTC students, school staff and area residents. To accomplish this, we employ a portfolio of approaches, including: individual assessment of Body Mass Index (BMI), diet and exercise counseling; social network support of healthy behavior changes; classroom education and improvement of curricula; school cultural change through establishment and support of school wellness councils; healthier school lunch menu items through development of new recipes; training of school nurses, food service workers, physical education teachers and physicians to incorporate nutrition and wellness education into their practices; web-based resources for teachers, students and families; and a community walking program. The Lean Team focuses on partnership and outreach through fostering linkages with MUSC and community partners that further our efforts to improve nutrition and physical activity habits among local residents, and on the development of programs, tools and policies that impact the health of the community. Additionally, we have focused this year on building partnerships with our eleven school-based JROTC programs, as this is a population that could provide talented recruits for military service. To identify and subsequently address the needs of the JROTC community, we will conduct a three-year school-based research study to look at 1) the fitness levels of local high school students enrolled in Junior ROTC programs (N=1800) as measured by BMI and body fat %, 2) their current physical activity and eating behaviors and the underlying reasons and challenges for unhealthy behaviors, and 3) piloting the effectiveness of an intervention to improve healthy behaviors to prevent and treat obesity tailored to their specific group's needs. Interventions will seek to enhance existing nutrition and fitness related curricula and activities in JROTC, but will be designed to address access and barriers specific to our local JROTC population. We have received IRB approval from Medical University of South Carolina (MUSC) and Charleston County School District (CCSD), and have approval pending from USAMRMC Office of Research Protection. Enrollment of

subjects for this research component and the longitudinal measurement is expected to begin with the 2011-2012 school year.
The Lean Team project was included in this contract in order to meet SEVIEW's Objective B3: Establish a Community Partnerships and Outreach Program to reduce health disparities, in order to lay a foundation for integrated efforts to address chronic disease burden in populations that could provide talented recruits for military service, and disseminate evidence-based research findings. Our project's goal is the prevention and treatment of childhood obesity through individual, family and community change. We are accomplishing our contract objective through implementing a portfolio approach of school and community-based activities and through a planned research project targeting the nutritional habits and fitness behaviors of JROTC students in Charleston County School District (CCSD).

This past year, we cultivated and formed several new partnerships that expanded our efforts to improve the health and fitness of children, families and teachers in the Charleston County schools. These partnerships led to the development of programs, tools and trainings that along with policy, systems and environmental changes are positively affecting the health of the school-based community. We have achieved a number of successes in furthering the wellness initiatives in the schools and community. Highlights (detailed further under subheadings below) include:

- Training school and community partners on BMI measurement, and provision of age-adjusted BMI charts to improve the quality of BMI data collected by the schools.
- Enhancing classroom education on nutrition and exercise/activity through the use of MUSC dietetic interns and medical residents who gave presentations to students in health science, health education, JROTC and culinary arts classes.
- Establishment of a Facebook page and Twitter accounts to encourage continued commitment to healthy behaviors.
- Forming of a new partnership that will result in a year-long broadcasting campaign involving five local radio stations to improve the exercise and eating habits of local residents.
- Supporting 53 schools to implement policy and environmental changes at the individual school level.
- Establishment of a "Doc Adopt" program that trained and paired physicians with 75% of local schools.
- Worked with partners to support a "Chefs-in-Schools" initiative modeled after First Lady Michelle Obama's Chefs Move to Schools Campaign, resulting in the development of a new recipe item for school lunch menus.
- Increasing the community miles walked by 2,726 miles, as a continuation of our weekly community-walking program, and increased participation by local residents.

Data collection for the research portion of our project cannot begin until we receive final approval from USAMRMC ORP, thus we do not have research results to report at this time. We received approval from MUSC IRB and the CCSD Research and Review Committee approved us but attached a guidance document (standard form) to our approval packet that listed additional stipulations. A telephone conference with USAMRC ORP resulted in consensus that we needed to make changes to our protocol and permission form to comply with this guidance document. Changes were made and all documents were resubmitted to USAMRMC ORP in June, and final approval is pending. We will have to resubmit protocol and form changes back to MUSC IRB once USAMRMC ORP approves them. Given these unanticipated delays, our new timeline for enrollment of subjects for longitudinal measurement is expected to begin with the 2011-2012 school year.

Project Activities:

- **Individual Assessment: BMI collection**
  South Carolina Schools are mandated to measure BMI's in third, fifth, and eighth grades for Fitness Gram reports and only once during high school. [26] These measurements are conducted by physical education teachers and school nurses. We learned that there measurements were often inaccurate in that students were often not being asked to remove shoes, extra layers of clothing or contents of their pockets prior to height and weight measurements, and some schools were not using age-adjusted BMI charts in their measurement collection. In an effort to ensure accurate reporting of BMI measurements and classification of children as underweight, healthy, overweight or obese, we partnered with the school district to create a demonstration video and a color-coded one page, age-adjusted BMI chart. These resources, available on our website www.musc.edu/leanteam,[25] were shared with CCSD physical education teachers and school nurses during professional development days. This year we also assisted six schools in the BMI screenings of 1100 students. Once approval is received to begin our research study we will collect BMI data on JROTC who enroll in our study (N=1800). Measurements will be collected twice per year.
- **Social Networking**
  This year, we established Facebook and Twitter accounts to increase our reach into the community to promote and support healthier behaviors related to nutrition and physical activity. Although there accounts were established this year, we have not optimally used them. Therefore, this summer we will have a college student intern working with us on this task.
- **Classroom Education**
  As an academic institution, MUSC serves as a rich resource to the schools and community through its many physicians, nurses, researchers, interns and residents. The Lean Team regularly uses MUSC dietetic interns and medical residents to augment curricula in the schools by creating presentations and activities for classroom teachers, as well as going into the classroom and delivering special presentations. This year we placed ten dietetic interns and nine medical residents into CCSD classrooms to deliver health-related presentations.
- **School Cultural/Environmental Change**
  - **Establishing a Wellness Culture**
    This year the Superintendent of CCSD mandated that all schools in the district form official "Wellness Councils". The Lean Team provided a checklist tool based on nutrition and physical activity best practice models to support the Superintendent's efforts as well as guide the activity of school wellness councils, and also encouraged the use of CDC's School Health Index as an assessment tool. Prior to this school year, only 22 CCSD schools had established wellness councils. This year the Lean Team supported activities of 53 school wellness councils- a change from 27% to 66%.

    One of the ways in which we supported school wellness councils was through the development of the "Docs-Adopt" program. In November 2010, our Director Dr. Janice Key, in her role as Chair of the Coordinated School Health Advisory Council (CSHAC), partnered with Charleston County Medical Society and CCSD to create our **"**Docs Adopt" program, where local physicians were recruited and trained to serve as a resource for the school wellness councils. This program led to 75% of CCSD schools having a physician on their wellness council. To date sixty physicians have been trained and paired with schools. Plans to train additional doctors for the remaining schools and retrain existing doctors on upcoming projects are underway for next year.

- **Healthier School Lunch Menus**

  One of our primary efforts this year has been to align with national and regional efforts (Michelle Obama's Lets Move!, Healthy, Hunger-Free Kids Act, US Army's Go Green initiative)[27] to improve school nutrition in local schools. To this effort, we have collaborated with local school food service directors (Charleston and Dorchester 2 counties), chefs and two coalitions (Slow Food Charleston, and Eat Smart Move More Charleston Tri-County) in brainstorming meetings throughout the year and worked together as a multi-partner team to enter a national school lunch recipe competition: the USDA's Recipes for Healthy Kids Challenge (http://www.recipesforkidschallenge.com).[28] As part of the competition, the team developed three new healthy school lunch menu recipes; one in the legume category and two in the vegetable category. Our legume recipe, Confetti Soup, came in third in the national competition and placed in the top 9 overall out of 340 recipe submissions. This soup will be incorporated into the school lunch menu for Charleston County in the upcoming school year.

  Most importantly, however, participation in this contest created strong community partnerships and opened the door to important new collaborations. One of these was the development of school nutrition posters that are now posted in school cafeterias throughout the District and provide nutritional analysis information on every item served or sold in our school cafeterias (see **Appendix 30**). The second is that we have been asked to work together with the CCSD food service administrative team to pilot additional new, healthier school lunch menu items in the next year. We envision that our work will enable the school district to develop recipes that will be compliant with the new regulations.

  In addition, the MUSC Lean Team visited the US Army base at Fort Jackson, SC to observe the rigors of physical training of JROTC students attending a week-long training camp and to learn about the Army's Go Green nutritional program. We plan to discuss the possibilities and benefits of using the same or similar model in the CCSD schools where JROTC students are enrolled.

Community Outreach:

We lead weekly walks that offer encouragement and support to area residents who are either starting or continuing a health journey. The walks are held every Saturday morning and are free and open to the public. Participants gather on the Charleston side of the Ravenel Bridge to check in with Lean Team leaders, sign-up to receive weekly emails and have a group photo taken to document the date and miles logged. Since November 2007, over 21,505 miles have been recorded. More than 2700 miles were logged this year. All walk participants receive a weekly update by email that includes the number of people walked, cumulative miles, pictures and relevant Lean Team or community partner activities. More than 500 people have signed up to receive the updates. An effort to reach deeper into the community with obesity prevention and treatment strategies has led to a new partnership with a local broadcasting company. The partnership came about through Eat Smart Move More Charleston Tri-County- a local chapter of the state organization. The broadcasting company is committed to encouraging area residents to improve their health. The campaign involves a twelve-month commitment of five local radio stations to deliver health messages through on-air broadcasts, social networking media and special events. SEVIEW and other community partners will have an opportunity to contribute their expertise by writing the health messages, appearing as guests and acting as a resource to radio personalities. Listeners will be encouraged to increase physical activity and eat healthier.

B3b. Community Engaged Scholars Initiative (CES)

Director: Jeannette Andrews, PhD, Associate Dean for Research and Evaluation; Associate Professor for the College of Nursing

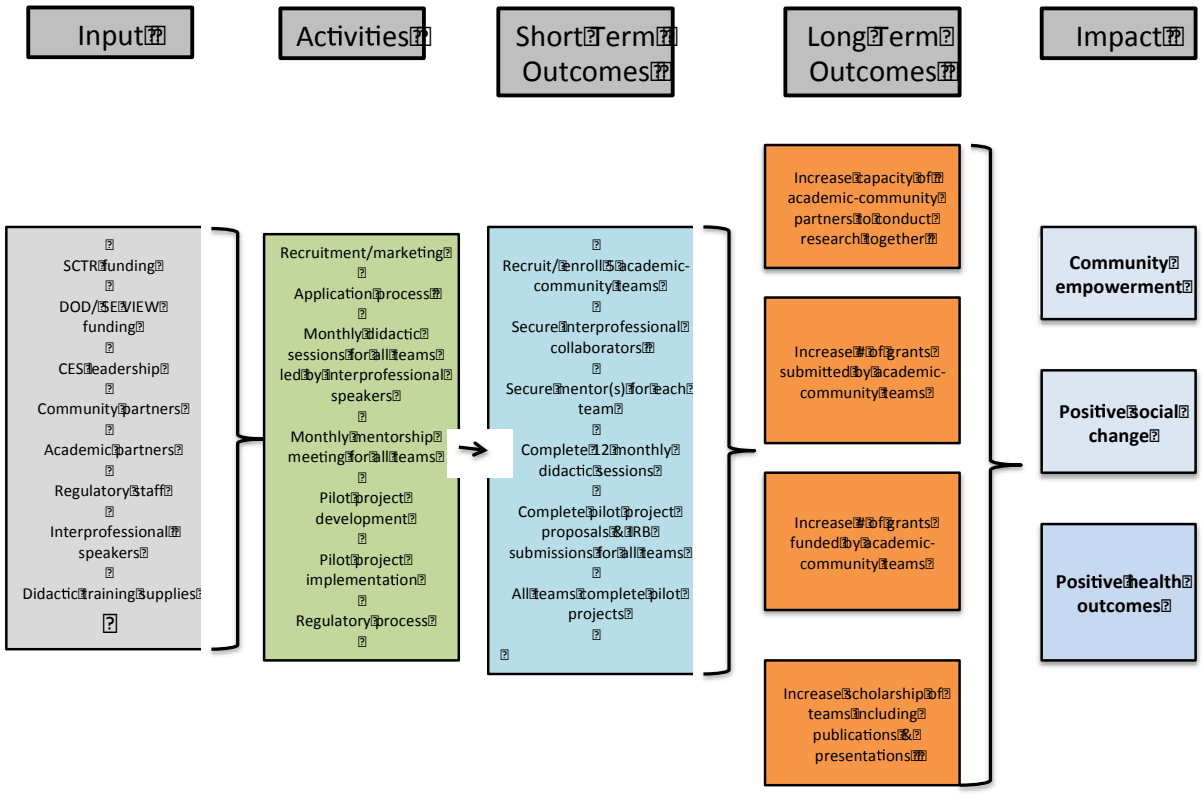
Goal: Increase the capacity of academic-community partnerships capable of conducting research in non-traditional settings with mutual ownership of the processes and products.

Distinguishing Characteristics: CES provides training, pilot funds and mentorship for teams consisting of an MUSC researcher and community partner(s) who have collaborative interests in community-based participatory research (CBPR) to eliminate health disparities. CES will help bridge the gap between clinical practice and community health needs.

Summary of Activities: Five CES teams, representing disciplines from across the MUSC campus and partners from various community sectors, were selected based on competitive, peer-reviewed applications. CES provides didactic training, mentorship and pilot grant funding. The didactic portion consists of 12 workshops that address definitions, principles, theories and methods of community based participatory research (CBPR); grants development; building and sustaining partnerships; evaluation; and career development. Each CES Team has an academic mentor to help guide a 1-yr project designed to produce preliminary data for a sustainable grant application. Each team receives pilot funds for the project.

The Community Engaged Scholars (CES) Program is an education and training initiative of the Center for Community Health Partnerships at the Medical University of South Carolina. This program provides training, pilot funds, and mentorship for five teams, consisting of an academic and community partner who have interests in community-based participatory research (CBPR). The goal of this program is to increase the capacity of academic-community partnerships to conduct research with mutual ownership of the processes and products, and ultimately to improve the health of our communities in South Carolina and beyond. **Fig. 9** illustrates the CES Program Logic Model (18 months):

Figure 9: Community Engaged Scholars Logic Model



- Didactic Training (Months 0-12): monthly sessions that address definitions, principles, theories and methods of community based participatory research (CBPR); grantsmanship, building and sustaining partnerships, evaluation and career development.
- Mentorship (Months 0-18): Each team will be assigned a mentor that will guide the development, implementation, and evaluation of a pilot grant award.
- Pilot Funds (Months 6-18): After the submission, review, and acceptance of a quality pilot grant application, each team will receive up to $10,000 to implement a community-based initiative. [NOTE: Pilot grants funds appropriated from separate grant funding]

Program Competencies:

- Understand the concepts and components of community based participatory research.
    - The Community Engaged Scholars Program enrolled 5 new academic-community teams in August 2010. The following is a summary of the teams and their status to date:
        - Elisabeth Pickelsimer, MUSC Biostatistics & Epidemiology
          Patricia Kelly, A Family Affair HIV Ministry
          Addressing the needs of incarcerated persons living with HIV/AIDS as they prepare for community re- entry: Ex-Offenders' Discussion of Unmet Needs (ExODUS)
            - Received local IRB approval; data collection through focus groups in 5 counties beginning March 2011-June 2011, data analysis and intervention development June 2011-October 2011.
        - Roger Newman, MUSC Department of Obstetrics & Gynecology
          Jermel President, The DAE Foundation
          Addressing childhood obesity in Title I schools in Charleston County: Evaluation of an Intervention for Child Wellness in Charleston County Elementary Schools
            - Received local IRB approval May 2011; intervention & data collection July-September 2011, evaluation & analysis October-December 2011
        - Carol Lambourne, MUSC Department of Family Medicine
          Myra Pinckney, St. James Santee Family Health Center
          Addressing quality improvement in a rural, federally qualified community health center: Missed Appointments and Missed Opportunities: An Intervention Development & Feasibility Study of Missed Patient Appointments at a Rural Health Center.
            - Received local IRB approval May 2011; data collection June-July 2011, data analysis August 2011, intervention development & feasibility testing September-November 2011.
        - Charlene Pope, MUSC College of Nursing
          Stacy Gaillard, Ralph H. Johnson VA Medical Center
          Vanessa Gant Clark, Ralph H. Johnson VA Medical Center
          Monica McCrackin, Ralph H. Johnson VA Medical Center
          Virginia King, Lowcountry AIDS Services
          Prevention of HIV/AIDS among Lowcountry Veterans: Asking Veterans Who Have Stood the Test of Time: A Community HIV Screening Program for Veterans
            - Awaiting local IRB approval; project to identify barriers to HIV screen of Veterans in Lowcountry to develop appropriate education materials and develop points of intervention, data collection July-August 2011, material development August-September 2011, intervention sustainability September-December 2011.

        - Elaine Amella, MUSC College of Nursing
          Laura Stefanelli, Respite Care Ministries
          Margaret Kunes, Respite Care Ministries
          Addressing the needs of persons with dementia and their caregivers: a mealtime training
            - Received local IRB approval; pilot study of mealtime intervention with staff, caregiver and persons with dementia components, data collection, analysis & evaluation March 2011-December 2011.
- Apply CBPR principals in the conduct of research.
    - Summary of didactic training completed sessions:
        - August 2010- History & principles of CBPR
        - September 2010- Partnership readiness I
        - October 2010- Partnership readiness II
        - November 2010- CBPR Lessons Learned: Presentations from the 2009 CES teams
        - December 2010- Community Assessment & Problem Identification
        - January 2011- Evaluation I
        - February 2011- Data Collection & Analysis
        - March 2011- Evaluation II
        - May 2011- Dissemination & Communication
        - June 2011- Partnership Evaluation
- Incorporate CBPR principals and approaches in grant proposals.
    - Additional education & training opportunities for CES Scholars, academic faculty and wider community:
        - "Implementation Science: What is it and why are experts and funding agencies promoting it?". Charlene Pope, PhD, MPH, RN. October 8th, 2010.
        - "Community-based participatory research: what is it and how can I find funding for my research?". Susan Newman, PhD, RN and Melissa Cox, MPH. October 14th, 2010.
        - "Academic-community partnerships panel: lessons learned from successful research teams". Georgetown Diabetes CORE, SC Hispanic/Latino Coalition, Us Too/Hollings Cancer Center. April 8th, 2011.
- Demonstrate CBPR efforts in a career portfolio.
    - SE VIEW Collaboration:
      Administrative staff from the CES project (J. Andrews & M. Cox) collaborated with Dr. Adams and the Stroke and Stroke Risk Initiative to submit a pilot grant proposal expanding the scope of previous SSRI research. The purpose of this grant is to conduct formative assessment related to the barriers and facilitators in the community to timely contact with emergency personnel at first sign of stroke. This participatory assessment will include those at risk of stroke, general public, emergency personnel, previous patients, providers and key stakeholders. This translational study will inform a future intervention to increase use of 911 of potential stroke victims, connecting the patients to telemedicine (currently in place by Stroke Team) and evidence-based clinical procedures. The pilot grant proposal was not accepted for funding, however, both teams have agreed to move forward towards an NIH R21 grant submission in Fall 2011.
- Communicate with audiences in both academic and community settings about CBPR principals and components.
    - Dissemination of CES program model and CES scholar teams project work:

- Gillenwater, G., Newman, SC. (May 2011). Navigating the Policy Maze through Partnership. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Winkler, J., Cook, C., Warner, G. (May 2011). A Successful Research Partnership Engaging Community Partners and a Medical University. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Carpenter, B., Leite, R. (May 2011). Hollywood Smiles. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Cox, M., Andrews, J., Newman, S., Gillenwater, G., Leite, R., Carpenter, B., Winkler, J., Warner, G. (May 2011). Academic and Community Reflections on Preparing for Partnership & Research: Lessons from the Community Engaged Scholars Program. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Newman, S., Andrews, J., Cox, M., Gillenwater, G., Leite, R. (May 2011). Community Advisory Boards in Community-Based Participatory Research: Best Processes. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Andrews, J., Newman, S., Cox, M., Leite, R., Gillenwater, G., Warner, G., Winkler, J. (May 2011). Navigating the IRB in CBPR: Academic and Community Perspectives. Campus-University Partnerships Expo. Waterloo Region, Canada.
- Cox, M., Andrews, J. (November 2010). Building capacity for sustainable academic-community partnerships: A case study of the Community Engaged Scholars Program. American Public Health Association Annual Meeting. Denver, CO.
- Cox, M., Andrews, J. (March 2011). Achieving outcomes with CBPR: Lessons from the Community Engaged Scholars Program. American Academy of Health Behavior Annual Scientific Meeting. Hilton Head, SC.

- Implement a pilot CBPR initiative.
  - Administrative changes:
    Revised budget for SE VIEW Nursing component (approved S. Slaughter & Grants/Accounting, December 2010), which includes the Community Engaged Scholars (CES) and Health Empowerment Zone (HEZ) initiatives. The revision removes $30,000 of pilot funds for CES and disperses them throughout personnel, travel, and supplies. The total direct costs and indirect costs are unchanged. The changes are summarized below:
    - Increase Dr. Jeannette Andrews effort to average 15% during Year 1
    - Add Dr. Susan Newman @ 15% effort
    - Increase CES guest speakers honoraria from $1,000 to $2,000
    - Increase CES curriculum supplies from $3,559 to $4,521
    - Increase CES faculty travel from $1,000 to $2,000
    - Add CES scholars "dissemination travel" to national/international CBPR conference $10,000

B3c. <u>Mobile Outreach Van, Educational and Navi gation Health Services for Underserved Populations (MOVENUP)</u>

Director: Marvella E. Ford, PhD, Associate Professor, Hollings Cancer Center,

Goal: Reduce disparities in cancer services access, morbidity and mortality in the I-95 Corridor with a focus on three common cancers occurring to a disparate degree in the SE VIEW regions: breast, cervical and prostate

Distinguishing Characteristics: An I-95 Corridor Health Advisory Committee provides advice and program review, identifies community agencies/health centers to be partners for MOVENUP, and

identifies service locations for the mobile unit. Students from three HBCUs participate in cancer education programs and cancer disparities research training.

Summary of Activities: MOVENUP is a creative, effective model of health outreach and service delivery. Activities are to: 1) provide needed mobile health screening and patient navigation services for breast, cervical, and prostate cancer; 2) provide cancer education and education related to nutrition/physical activity in I-95 Corridor Counties; and 3) develop a cancer research training program with students from three SC HBCUs. Mobile breast and prostate cancer screening and navigation services are being provided in Darlington and Hampton Counties. MOVENUP helped established the Yemassee Health Initiative Coalition and co-sponsored Yemassee Health Days; developed and provided a 4-hr cancer education training program with a Train-the-Trainer approach; developed and deployed various tools to measure general cancer knowledge, prostate cancer knowledge, perceived self-efficacy in physician-patient interactions, and perceptions of cancer clinical trials; and mentored students from three SC HBCUs in cancer research studies and development of cancer education tools.

Task 1. Provide mobile health unit services and patient navigation services

- Screen for breast cancer, cervical cancer, and prostate cancer, and
- Offer patient navigation services to link screened persons who need follow-up care with a "medical home" (via a private medical practice, a federally qualified health clinic, or a rural health clinic)

Task 2. Provide cancer education awareness and education related to nutrition/physical activity to the identified I-95 Corridor counties

- Use the "Train the Trainer" model to train community volunteers to conduct cancer education sessions in their own communities
- Include cancer education training programs focusing on the role of nutrition and physical activity in cancer prevention, improved cancer treatment outcomes, and prevention of cancer recurrence

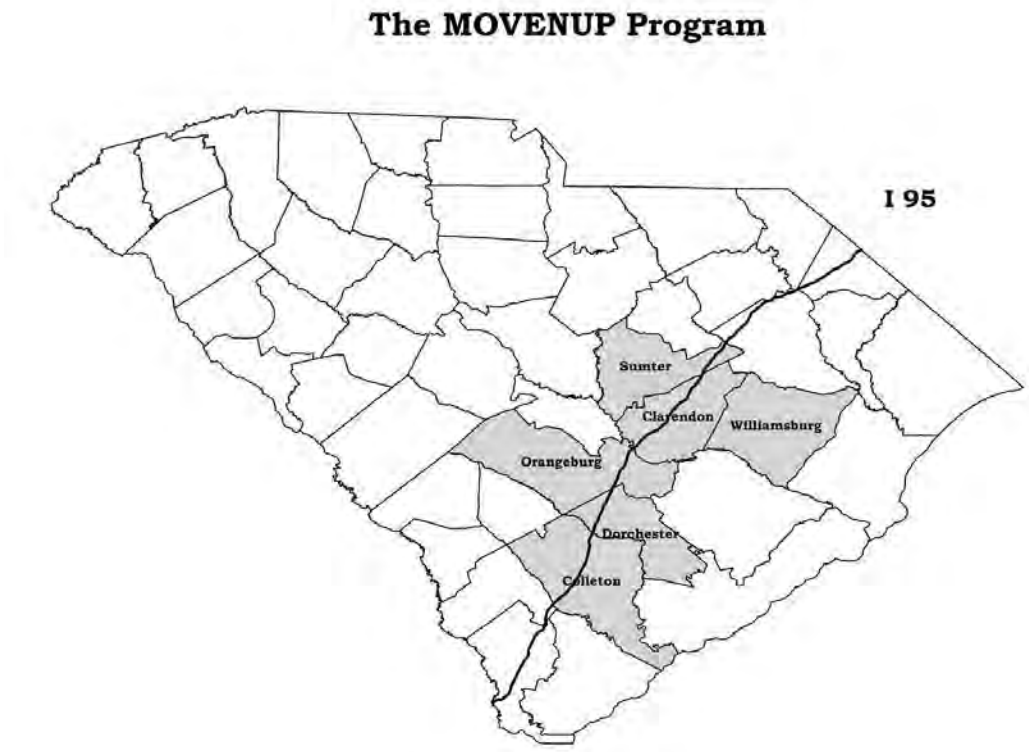
Task 3. Develop a cancer research-training program with students from the following Historically Black Colleges and Universities (HBCUs): Claflin University, South Carolina State University, and Voorhees College

- Identify and select students to participate in MUSC's Summer Undergraduate Research Program (SURP)

The chronic diseases we addressed are three common cancers occurring to a disparate degree among the residents of the I-95 Corridor counties: breast, cervical, and prostate cancer. The long-range goal of the MOVENUP Program is to reduce disparities in cancer services access, morbidity and mortality.

The I-95 Corridor represents a vital opportunity and a valuable resource for improving health outcomes and fostering economic development. The state's highest concentration of negative statistics is found here: high rates of chronic health conditions, high unemployment rates and poverty levels, and low rates of educational achievement.

Figure 10. Geographic Area Served by the MOVENUP Program



Tables 7 and 8 describe sociodemographic characteristics of the I-95 Corridor counties in terms of education, unemployment rates, and income.

Table 7. Education Characteristics of the I-95 Corridor Counties

County Name	< Ninth Grade Education	High School Diploma	Four or More Years of Post-High School Education
I-95 Corridor Counties			
Clarendon	13.1	65.3	11.4
Colleton	10.2	69.6	11.5
Dorchester	6.1	82.1	21.4
Orangeburg	10.1	71.5	16.3
Sumter	9.6	74.3	15.8
Williamsburg	11.8	65.5	11.5

Source. U.S. Bureau of Census. Census of Population and Housing, 2000

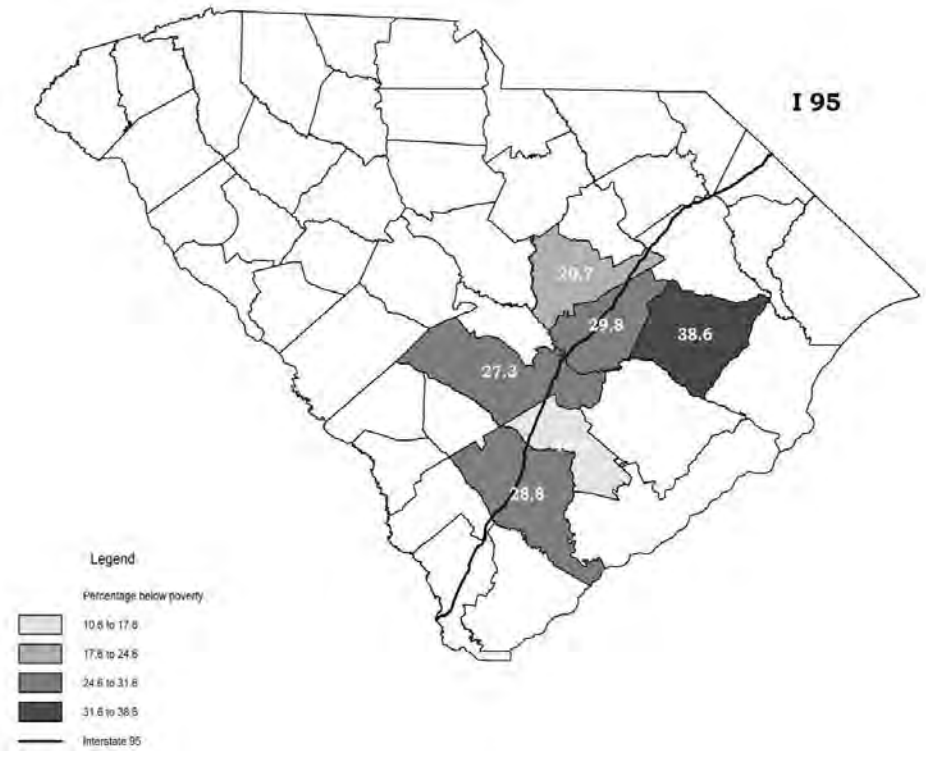
Table 8. Unemployment Rates for I-95 Corridor Counties, July 2004 (Unadjusted)

County Name	Unemployment Rate	Rank
I-95 Corridor Counties		
Clarendon	9.6	16
Colleton	7.5	27
Dorchester	4.0	43
Orangeburg	10.2	14
Sumter	8.7	23
Williamsburg	11.4	3

Source. S C Employment Security Commission, 2007

Of the fifteen counties in the state grouped in the lower third according to per capita personal income, all but three are adjacent to the I-95 Corridor. **Fig. 11** depicts poverty rates in the I-95 Corridor counties.

Figure 11. Map Depicting Poverty Rates in the I-95 Corridor Counties (Based on 2000 Census Data)



Shortage of Health Services in the I-95 Corridor Counties

Data from **Fig. 12** suggest that there are few cancer screening sites in the identified I-95 Corridor counties. The cancer screening and cancer education services filled a niche in this geographic region. The patient navigators on the mobile health unit linked screened clients who have abnormal findings to a primary health care center (a "medical home") for follow-up care. We utilized the federally qualified community health centers in the I-95 Corridor as medical homes.

Figure 12. Location of Hospitals in the I-95 Corridor Counties

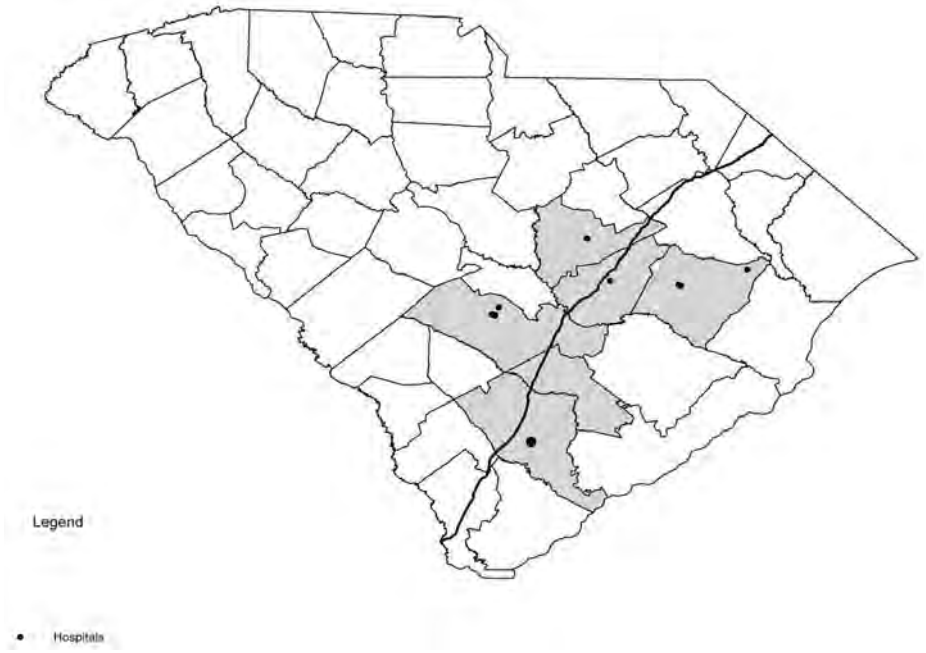
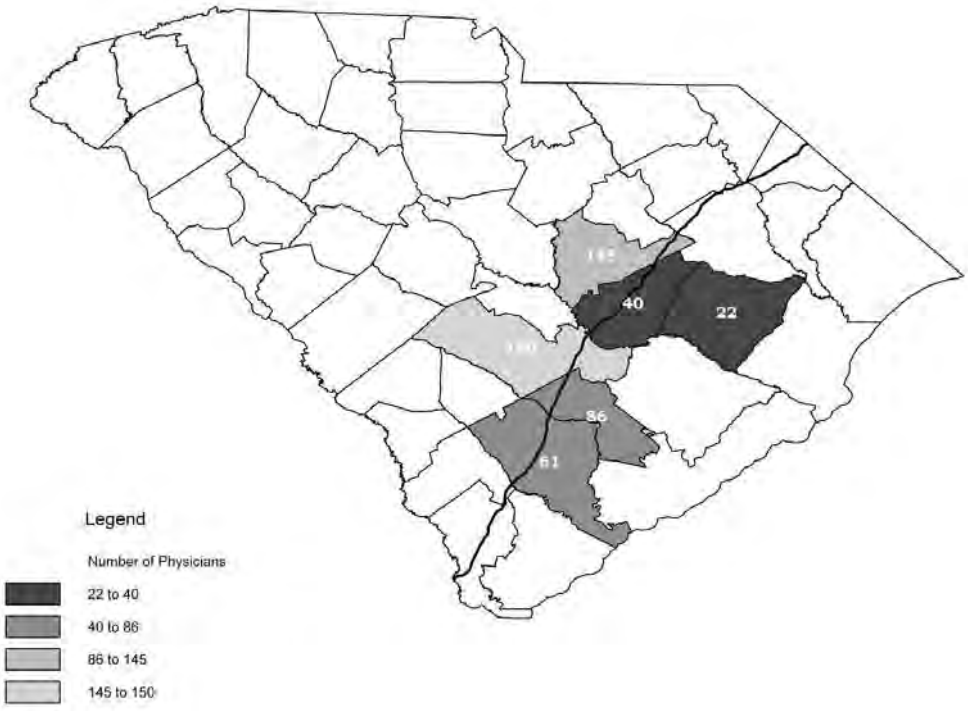


Fig. 13 shows that few physicians provide health care in the identified I-95 Corridor counties.

Figure 13. Location of Physicians Providing Health Care In the I-95 Corridor Counties



Rationale for Geograp hic Area Selected: The I-95 Corridor encompasses counties that experience persistently high levels of poverty and high rates of premature mortality due to undetected, untreated, and under treated chronic health conditions. These are some of the most socially and economically disadvantaged counties in the nation.

Rationale for Chronic Diseases Targeted: The MOVENUP program demonstrates a creative and effective new model of health outreach and service delivery in rural communities. Through MOVENUP, the health needs of a wide range of rural population groups including, but not limited to, low-income populations, minority populations, and populations experiencing chronic health conditions will be met. The chronic diseases we have identified (breast cancer, cervical cancer, and prostate cancer) fit within the identified priority areas of the HRSA Rural Health Care Services Outreach Grant Program: Chronic Disease, Women's Health, an African American target population, and Safety Net Collaborations. Disparities in the incidence and treatment of cancer have a significant impact on economic growth and quality of life in South Carolina's rural and minority communities.

B3d. Health Empowerment Zone

Director: Deborah Williamson, DHA, CNM, Associate Dean for Practice; Assistant Professor, College of Nursing

Goal: Develop and validate an inclusive academic/community partnership in North Charleston, SC addressing neighborhood-level characteristics related to availability of healthy food and physical environments.

Distinguishing Characteristics: Combines high tech healthcare and 'high touch' community engagement, education and empowerment; has dual focus on rapidly growing Hispanic and historically underserved African American populations; creates 360º partnership embracing health practice, contractual arrangements, health policy task forces and research.

Summary of Activ ities: Collaborated with Executive Committee of Healthy North Charleston to identify specific goals and objectives for promoting healthy eating and active living; developed and submitted Community Action Plan Grant to CDC. Collaborated with community partner Metanoia, Inc. to develop and submit a USDA grant. Partnered with community service agencies, school district and faith-based partners in multiple health fairs and health education activities.

The Health Empowerment Zone (HEZ) promotes individual, systems, and policy changes to create and enable a culture of healthy eating and active living thereby reducing childhood obesity and preventing obesity-related conditions. The purpose of the project is to engage the North Charleston community in creating a safe access to a healthy lifestyle that includes healthy eating, active living and a clean environment where people live, learn, work and play. Community members and top-level leaders in all community sectors will collaborate to implement policy and environmental strategies to create sustainable policy, system and environmental change.

Goal 1: To create an inclusive and effective community-academic partnership

Objective 1*: By March 2011 identify key partners reflecting the diversity, expertise, and community involvement required to promote healthy eating and active living in North Charleston*

- A 12-member coalition was formed representing community agencies, NGOS, and residents. Members voted to identify the group with the name of Healthy North Charleston (See **Appendix 31**, CDC CHANGE Tool for membership list). Five working groups established: School-based activities, community gardens, transportation, food literacy, and mini-grants. There were 9 coalition meetings and 4 scheduled working group meetings in 2010 -2011.

Objective 2*: By January 2011 in collaboration with the Achieve grant team, complete needs assessment of systems, environments, and policies that affect healthy eating and active living to create a community*

*action plan using the CDC CHANGE Tool for North Charleston (*See **Appendix 32**, the CDC Change Tool completed by Healthy North Charleston coalition).

Goal 2: Creating a "Movement"

Objective 1*: To collaborate with the community (neighborhood associations, schools, worksites, and faith based organizations) to provide a quarterly event promoting healthy eating and active living that may include recreation, education and/ or screening in each of the high school attendance zones in North Charleston*

- Funding for mini-grants secured from the CDC through an Achieve grant HEZ PI provided guidance for Healthy North Charleston Coalition for the development of the grant application and selection of 4 out of 13 submissions to receive funding:
    - Healthy Meeting Policy - Lowcountry Alliance for Model Communities (LAMC)
    - Urban Gardens – Metanoia and Lowcountry Food Bank
    - Swim Team (Swimming lessons) Girl Scout Troop #322
- Academic/Community collaborations for health education and screening
    - Chronic Disease (Diabetes and Hypertension)
        - 17 community events with 1062 participants
        - Community Partners:
            - City of North Charleston, businesses (Oficina Galvez, Centro Americano Mercado, Fanta Family Festival, Alston Arms Apartments, Tienda Emerelda, Panadería Tlaxcalita), Faith based (Metanoia, North Palm Church), Mexican Consulate, and Harvest Free Medical Clinic
        - Academic Partners:
            - MUSC Department of Family Medicine and College of Nursing
    - School Health (BMI, vision and hearing screenings, and health education related to healthy eating and active living for students and parents
        - 7 Elementary Schools (Mary Ford, Dunston, Chicora, Burns, Hursey, Midland Park, Mitchell)
        - 1 high school (Stall HS)
        - 675 students and 70 parents
        - Community Partners
            - Charleston County School District (CCSD)
            - South Carolina Department of Health and Environmental Control (SCDHEC)
        - Academic Partners
            - MUSC College of Nursing
            - MUSC Department of Pediatrics

Goal 3: Increase availability and accessibility of healthy foods in North Charleston

Objective 1*: By June 2013 to increase by 25% the number of servings of fresh produce (fruits and vegetables) available to school age children.*

- HEZ staff and MUSC nursing students began working with administrators and teachers at Hursey Elementary School in May 2011 to develop a community garden curriculum for students and their families with a focus on food literacy. Working with the school nurse the students will participate in collecting baseline biomedical markers of height, weight and calculating BMIs the last 2 weeks of May 2011. First planning committee meeting occurred 3/17/2011. Kick-off date for the nutrition education and community garden planned for the Fall 2011.
- Mini grant funding mentioned above supported a community garden for the children attending a summer program at Metanoia, a faith based organization.

Objective 2*: To increase the availability of healthy foods to residents of North Charleston by creating new policies, and new sources of healthy foods.*

In collaboration with Metanoia, a faith based organization, a $25,000 NIFA Community Food Projects Planning Grant was submitted to establish a GIS system tracking 1) food availability, 2) health indicators, and 3) the price of food in the Charleston region. The GIS system will be complemented by photographs of alternative-market sources of food to provide an accurate understanding of the availability of food in North Charleston and the potential resources of residents to be spent on local foods. This is part of a broader effort to generate a stronger local food economy, and to recruit a grocery store to the 'Food Desert' that currently exists in the southern region (the neck area) of North Charleston.

Goal 4: Create an environment that supports physical activity

Objective 1*: By June 2013 to have completed walkability surveys at elementary schools in North Charleston and disseminated the results to school wellness committees, PTAs, and neighborhood associations*

- Walkability Checklist completed for 2 elementary schools in North Charleston and disseminated to school wellness committees for development of follow-up action plan.
- Transportation guide: In collaboration with DHEC, Council of Governments, and CARTA HEZ staff worked with MUSC graduate students on the development of a template for transportation guides for families in North Charleston showing bus routes to grocery stores and farmer's markets. (See **Appendix 33**)

Objective 2*: To facilitate the mission of the school wellness committees in North Charleston by linking the committees to existing resources and building capacity for acquisition of new resources to promote physical activity in school aged children*

North Charleston Sports Complex: MUSC CON and Dept. of Pediatrics, CCSD, North Charleston Recreation Department, Charleston County School District, and community members working with business interests to develop a sports complex that addresses physical, emotional, and spiritual health.

B3e. Healthy People in Healthy Communities

Directors: Brent M. Egan, MD, Professor, Departments of Medicine and Pharmacology; Marilyn A. Laken, PhD, Professor of Nursing and Medicine; Frank Clark, PhD, Professor, Vice President for Information Technology and CIO

Goal: Promote awareness of risk factors for chronic disease, behaviors to achieve healthy lifestyles, and access to effective healthcare and necessary medications as keys to lifelong health promotion and disease prevention.

Distinguishing Characteristics: Engages in community dialogues about ongoing needs and resources; provides health education and small grants for local programs; supports health screening/referral for care; assesses and overcomes barriers to obtaining healthcare and medications; strengthens local healthcare delivery network; builds local capacity for sustainability; promotes and assists adoption of electronic medical record (EMR) systems and HIT.

Summary of Activities: Established effective dialogues with schools, churches, worksites, practices and local governing/policy groups; assessed local availability and gaps in resources; and re-evaluated initial approach to building local capacity. Identified need for time extension/additional funds to: promote adoption of EMR; fully engage providers in the Quality Improvement Network (QIN); establish local Health Information Exchanges (HIEs) and link them to the National Health Information Network (NHIN); assess impact of clinical automation in the care delivery process, and assess impact on qualitative and quantitative measures of lifestyle change and use of primary healthcare services and medications.

During the first year of SE VIEW, the Healthy People in Healthy Communities Project has focused principally on developing strong relationships with stakeholders, understanding their health interests, resources, programs and needs an discussing collaborative opportunities for raising health awareness through educational and screening programs and to improve access to care and medications through

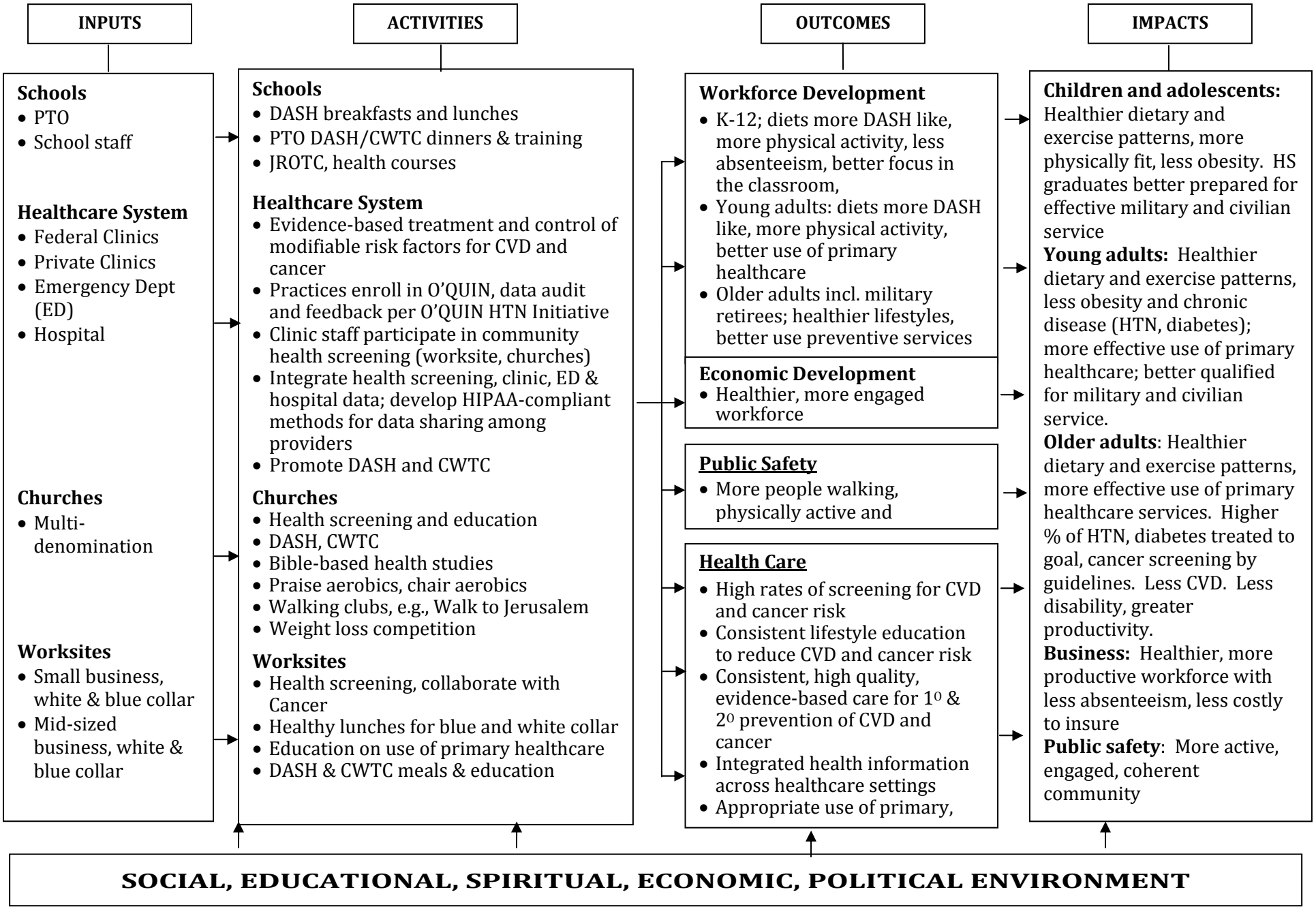
referral and follow up. The team has been active is learning from the stakeholders to create an asset map of a wide variety of resources throughout Williamsburg County. We anticipate this resource will be very useful in maximizing program efficiency, i.e., matching needs and resources, not only for the duration of this project but also in the future years. It is part of equipping and resourcing the County for sustainable success.

Since we are still awaiting final human subjects approval, we have not engaged in screening and referral efforts that include capture of personal health data. Since several stakeholders are already engaged in some plans, we have provided technical support and expertise whenever and wherever possible without engaging in data collection. While awaiting regulatory approval, the team has been busy creating a Williamsburg County asset map composed of local resources geocoded that would assist all stakeholders, build local capacity to improve health and sustain local efforts. Mr. Shaun Wagner would lead the effort in development of asset tool.

The SE VIEW program is at the center of our team's long-term focus, i.e., health promotion and disease prevention across the lifespan. Consequently, we have a number of related activities, which interact dynamically with and support our work in SE VIEW. These projects include significant capture of cardiovascular risk factor data at the patient and practice level. Analyses and reporting of these data is summarized in abstract form and a list of related publications. The research has led to funded and pending applications to improve health and reduce disparities with a focus on hypertension and diabetes.

Mission / Purpose: Health Promotion and Disease Prevention Across the Lifespan for Residents of Williamsburg County: Healthy People in Healthy Communities.
Objectives: Captured as outcomes and impact as summarized in Logic Model on next page.
Strategy: Promote (i) healthy lifestyles and (ii) access to effective care and medications through key community stakeholder groups including churches, medical clinics, schools, and worksites in collaboration with government and other key community leaders and groups. The strategy is imbedded in the activities described in the Logic Model **(Fig. 14)**

Figure 14. Logic Model for a Healthier Williamsburg County



Measures of Activities and Outcomes from Logic Model Activities:

- Schools: Number of schools implementing DASH diet[29]; nurses trained in screening and referral via number of recorded screenings; number of schools implementing health and family surveys/screenings in HS science courses; number of schools implementing evidence-based physical activities.
- Worksites: Number of worksites implementing DASH and PA programs; number implementing health screening; number using DHEC tobacco cessation referral services.
- Churches: # participating with Cooking with the Chef (CWTC), # using Sunday health sermons, # participating in weight loss contests, # bible study health groups, # doing Praise Aerobics, walking clubs, chair aerobics, # participating in health screenings.
- Clinics: # recommending DASH eating plan, # referrals to CWTC at churches, # referring for Tobacco cessation via DHEC # routine screening and evidence-based treatment for HTN, Diabetes, cancer, hyperlipidemia.
- Restaurants: # participating in DASH CWTC program.

Outcomes (when possible measures will be obtained Year 01 & 03 to assess change):

- Schools: Number of nurse referrals from positive screens, amount of DASH food eaten by students (food purchases by schools); surveys of Middle and High School students with YBRFSS questions related to nutrition, physical activity, use of healthcare services; number of family health histories returned; changes in foods sold via vending machines.
- Worksites: Changes in physical activity, nutrition [DASH-type meals (fruits, vegetables, whole grains)], tobacco use, use of healthcare services as assessed by selected BRFSS questions; number of health screenings and referrals; pre-post worker health survey and health screening BMI, BP, lipids, HbA1C in collaboration with Cancer Van (Dr. M. Ford).
- Churches: Number of churches serving DASH meals, % of meal events based on DASH principles; number of weight loss contests/mean weight lost/church; number of Sunday health sermons; number of Bible health classes; number of health screening event, number of members and guests screened; number of elevated values and referrals; number of churches and members participating in surveys using selected questions from YBRS and BFRSS (age appropriate) for nutrition, physical activity, use of healthcare services.
- Clinics: Number of clinics providing DASH/CWTC information; changes in screening, detection, treatment and control of BP, lipids, HbA1C, DHEC referrals for smoking cessation; number of clinics and the number of patients completing survey using selected questions from YBRS / BRFSS to assess nutrition, physical activity, use of healthcare services
- Restaurants: Number of restaurants trained in DASH / CWTCH, number of restaurants serving DASH foods and meals, number of customers purchasing DASH meals.
- Grocery stores: Change in purchases of DASH-type foods (more whole foods) vs. highly processed foods (snacks, sweets).

Williamsburg County has a relatively small population, but it occupies a comparatively large land are of ~900 square miles. The land area of the county underlies our rationale for having ~2.4 FTE on this project dedicated to developing relationships with key stakeholders to reach citizens in communities throughout the county where they learn, worship, receive healthcare, and work. The map of Williamsburg County (**Fig. 15**) illustrates the location in which stakeholder contacts are being made and relationships built.

Figure 15. Map of Williamsburg County

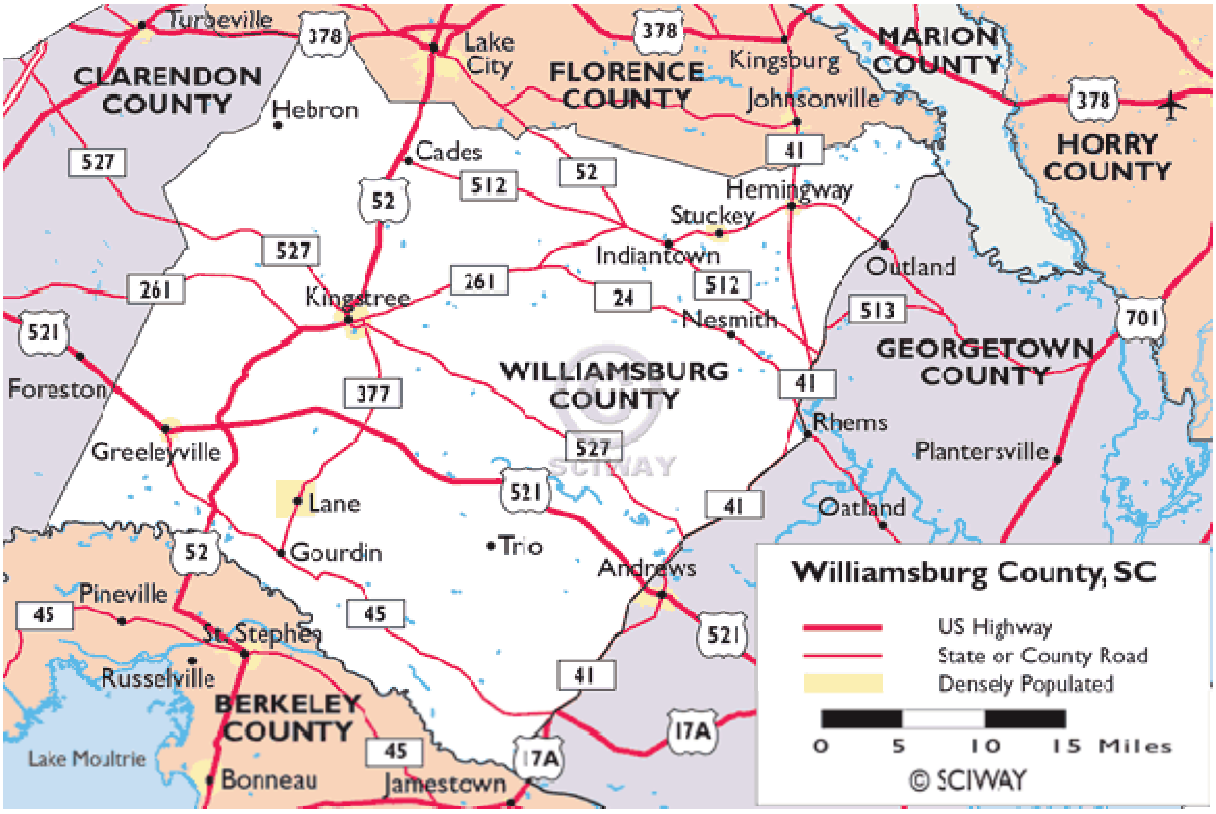


Table 9 lists our interactions with key stakeholder groups, which include: churches, medical sites, schools, worksites and miscellaneous items. Each report includes a narrative summary on the left and a letter on the right describing the interaction.

Table 9. Interactions with Key Stakeholder Groups

CHURCHES. (a) Initial contact (b) Initial meeting (c) Follow-up (d) Presentation (e)Activity/Event	
Mt. Zion Methodist Church, Kingstree, SC: Reverend Jack Washington was contacted in August 2010 with follow up in September 2010 to discuss health promotion & disease prevention. Ms. Sheryl Mack, along with new employee trainees Mr. Darin Singleton and Ms. Pat Lewis, presented the SE VIEW program to a diverse group (gender and race) of 25 United Methodist Pastors at their regular monthly meeting in October 2010.	a, b, c, d
Reverend Washington agreed to host a meeting of 21 clergy of diverse denominations in February 2011, Dr. Brent Egan was the guest presenter. He shared general information on the purpose and funding of SE VIEW and our program's purpose, core objectives, information and resources including our website. The resources include DASH for Good Health Southern Style Cookbook authored by Reverend Jeannette Jordan (pastor, nutritionist, certified diabetic educator); DASH DVD Shopping Guide (14 minutes); DASH For Good Health Southern Style "It's in the Word" – a eating plan faith-based study guide authored by Ms. Rosetta Swinton (a Registered Nurse currently serving as a Missionary in Malawi) and Handouts/Bookmarkers with printed health messages.	d

A healthy lunch was provided which allowed time for fellowship, an exchange of ideas, comments and questions with strong interest in the cookbook and faith-based study guide. Ms. Lewis, Mr. Singleton and Ms. Mack exchanged business cards and information with clergy and discussed health ministries, health fairs and other faith-based events. The clergy extended invitations to the three coordinators to attend future meetings, programs and their worship services. Rev. Washington, who hosted the luncheon, invited Dr. Egan to bring a health message to his congregation, Mt. Zion United Methodist Church. On Sunday, June 26, Dr. Brent Egan will be the guest speaker during the 10:00 am Family and Friends worship service. The theme is, "Biblical Prescription for Good Health." A handout prepared for church members and guests is included. Following the worship service, desserts will be provided to members and guests. The deserts will be prepared by Ms. Connie Washington, Owner of Connie's Bakery & Specialty Shoppe of Kingstree, SC. She will use recipes from the DASH for Good Health Southern Style Cookbook. Ms. Washington is a successful minority business owner well known to the town and has been preparing and featuring various recipes from our cookbook since April 2011.	d, e d, e
Jerusalem African Methodist Episcopal Church, Lane-Gourdine, SC. Dr. Allen Parrott, Presiding Elder. Palmetto Conference, Kingstree District was contacted in October by Ms. Pat Lewis and Ms. Sheryl Mack in October with a request to participate in any future activities in Williamsburg County. Ms. Mack, Mr. Singleton, and Ms. Lewis were invited to the AME Kingstree District Meeting in November 2010 at Jerusalem AME Church in Lane-Gourdine, SC. Ms. Mack's topic was Healthy People in Healthy Communities in which she addressed hypertension, diabetes, stroke warning signs, good nutrition, physical activity and access to quality care and medications. It was an interactive session with 70 AME pastors and Laity members. Dr. Marilyn Laken followed up by telephone with Dr. Parrott in January 2011 to explore next steps and ongoing activities to reduce chronic disease.	a b, d c
St. John Mission Baptist Church , Greeleyville, SC. Ms. Sheryl Mack was contacted by Ms. Betty Scott, a foodservice employee for the Williamsburg County School District and asked to participate at their **Annual Ushers Program** in October 2010 at St. John Missionary Baptist Church, 50 people were in attendance. Mr. Singleton and Ms. Lewis accompanied Ms. Mack as a part of a training activity. The topic focused on developing healthy lifestyles and the important role Ushers can play in disseminating information to members of their congregation with the Pastor's permission. The invitation to speak at the Ushers program came as a result of Ms. Scott hearing Ms. Mack present at a workshop for county school district foodservice employees in Kingstree, SC prior to school opening in August 2010.	a, b, c, d
New Mt. Carmel AME , Hemingway SC. During March 2011, Ms. Pat Lewis attended New Mt. Carmel AME Annual Women's Conference in Hemingway, SC. She spoke with Ms. Denise Washington, RN of the church regarding participating in activities, e.g., health fairs. In addition, she promoted the potential purchase of DASH cookbooks for the church. In May 2011, Ms. Lewis called to schedule a meeting with the Ms. Wessie Brown, Director of the Adult Day Care at New Mt. Carmel AME Church. Ms. Lewis was invited to speak to the senior group on May 31st, there were 17 participants, sold 11 DASH for Good Health Southern Style cookbook. The topic was about nutrition and physical activity for seniors.	d, e
Bethlehem AME Church, Hemingway, SC, Pastor Rebecca Evans. During March 2011, Ms. Pat Lewis attended Bethlehem AME Women's Day Program in Hemingway, SC where she	b, c, d, e

promoted the program and the DASH cookbooks. On recommendation from Drs. Brent Egan and Marilyn Laken, Ms. Pat Lewis contacted Pastor Rebecca Evans in March 2011 to inquire about "Train the Trainer" workshops for residents in Williamsburg County. The program adopted from "Cooking with the Chef" teaches principles of healthy food preparation; i.e. DASH for Good Health Southern Style. Pastor Evans recommended that a letter be sent to AME Bishop Preston W. Williams, II requesting a list of individuals certified in the food preparation training program.	
Greater St. John AME Church , Trio, SC. As a result of the meeting in February 2011 of Pastors from diverse denominations hosted by Reverend Jack Washington at Mt. Zion United Methodist Church, Mr. Darin Singleton was invited to speak at a Black History program by Reverend Alice Wright, Pastor of Greater St. John AME Church in Trio, SC. Mr. Singleton spoke about hypertension, diabetes and adopting healthy lifestyles. He distributed handouts that promoted health messages.	c, d, e
Bethel United Methodist Church , Kingstree, SC. During February 2011, Mr. Singleton was invited by Ms. Colette Israel of Bethel United Methodist Church in Kingstree, SC to serve as a presenter at her church. She also indicated that the foodservice staff would prepare a meal from the DASH for Good Health Southern Style cookbook, date is tentatively scheduled for the 5th Sunday in July. Mr. Singleton followed up with Ms. Israel to confirm presentation on June 26th. He will present information about the program and healthy lifestyle and access to care/medication.	a, b
Bethesda United Methodist Church, Cades, SC. Rev. James Lane. In April 2011, Ms. Lewis spoke with Mr. Thelbert Cooper of Bethesda United Methodist Church about the first annual Bike-A-Thon and health event in May 2011 and requested setting up a table display. Placed a follow up call on May 10th to confirm participation in Bike-A-Thon on May 21st. Ms. Lewis participated in the Bethesda United Methodist Church Bike-A-Thon in Cades, SC; 150 people participated in the 3 mile walk and bike ride. Healthy snacks (fruit, granola bars and water) were provided. Handouts were disseminated and sold 9 DASH for Good Health Southern Style cookbooks. Rev. James Lane. Ms. Lewis met Ms. Joslyn Cooper, Health and Welfare Committee Chair, who is planning a health fair in October 2011. Rev. James Lane and attends the Pastor's monthly meetings at Mt. Zion United Methodist Church in Kingstree, SC. He was present for Ms. Mack (October 2010) and Dr. Egan's (February 2011) presentations. Mr. Singleton met Ms. Cynthia Williams, Health Coordinator and Pastor Lane. Both expressed a need for more health initiatives.	a, b, c, d, e
Union Baptist Church, Salters, SC. During March 2011, Mr. Singleton spoke with Mrs. Ethel Jackson, RN of Union Baptist Church in Salters, SC where she serves on the Health Ministry team, she asked him about serving as a presenter at her church. She is also a school nurse within the Williamsburg County School District. Mr. Singleton saw Ms. Jackson again while working at the "A Family Institute" health event in Greeleyville, SC in April 2011. She suggested he give her a call. Mr. Singleton had a formal meeting with Ms. Jackson in May 2011 to discuss upcoming activities at her church and potential involvement.	a, b, c

Cedar Grove Baptist Church, Andrews, SC. In May 2011 Mr. Singleton contacted Mr. Harry Darby, Trustee at Cedar Groove Baptist Church, and a Williamsburg County Councilman, to request a meeting to discuss the health promotion – disease prevention program. They met within the week to discuss the program and determine the church current activity. Mr. Darby states the church does not have an established health ministry, but they have 2 Registered Nurses that conduct some form of health screening. Mr. Darby would like to share the information with his Pastor and the Board and will follow up with Mr. Singleton.	a, b
First United Methodist Church, Hemingway, SC. On May 12th Ms. Lewis met Ms. Seth Walker, RN of First United Methodist Church who stated that they have an inactive health ministry and suggested that she contact Pastor McGuirt. She met with the Pastor on June 1st and he confirmed that the church does not have a health ministry, but several Registered Nurses, an unofficial walking club, dinner with friends with healthy foods prepared. Pastor McGuirt is interested in participating in a health fair and will appoint health ministers by Fall 2011. Ms. Lewis will follow up.	a, b, c
New Beginning Christian Church, Lane, SC, Pastor Harriett Masingill. Ms. Lewis and Mr. Singleton met with Pastor Harriett Masingill. Mr. Singleton will serve as a presenter on June 25 at a brunch. Pastor intends to prepare some of the recipes from the DASH for Good Health Southern Style cookbook. Mr. Singleton will address the congregation about our health promotion – disease prevention SE VIEW program.	b
HEATHCARE SITES: (a) initial contact (b) initial meeting (c) follow-up (d) presentation (e) Activity/Event	
Department of Health and Environmental Control (DHEC), Region 6, Kingstree, SC. July 2010; Ms. Mack called Ms. Regina Nesmith, Director of Health Education, DHEC, Region 6, to schedule an appointment with her to discuss our role in the SE VIEW health promotion – disease prevention grant. I received a return call in August 2010 and met with Ms. Nesmith to provide a brief overview and discuss existing programs similar to what we are hoping to do. Our meeting could provide insight and a snapshot of Williamsburg County. She informed me of some upcoming events and extended an invitation to participate. Ms. Nesmith is well respected in the county and in her position. She also is a driving force behind an organization called the Interagency Council comprised of many agencies and organizations. They have been on summer break and will begin meeting again in September 2010 on the 3rd Thursday of each month at the County Library in Kingstree, SC. Follow-up meeting is scheduled for January 2011. January 2011; Dr. Egan and Ms. Mack met with Ms. Regina Nesmith, Director of Health Education – DHEC Region 6 and Ms. Janice Gamble, Director of Community Outreach – Black River Healthcare, Inc. to discuss SE VIEW "Promoting Good Health Across the Lifespan in Williamsburg County" and how we can best partner to serve the community and county. Ms. Nesmith (DHEC) described many of their ongoing programs and saw a common message in much of our proposal that appear to correlate or strengthen their programs. Ms. Gamble was representing a FQHC, Black River Healthcare, Inc. and was interested in our approach and working with us. It was a positive meeting; DHEC and one of Black River Healthcare, Inc. site (Family Practice) are located in the same building. Of the two remaining sites, one is in Kingstree, SC located in the medical plaza complex near the hospital (Women's Health Center) and the other is located in Greeley Ville, SC (Family Practice)	a, b

National Kidney Foundation and DHEC, Region 6October 2010 Ms. Mack participated in a health screening activity sponsored by the National Kidney Foundation and DHEC, Region 6; disseminated health information to 30 participants. Event provided an opportunity to meet members of the community, discuss hypertension, our program and their role as stakeholders.	e
Black River Healthcare, Inc. January 2011; as noted above Dr. Egan and Ms. Mack met with Ms. Regina Nesmith, Director of Health Education – DHEC Region 6 and Ms. Janice Gamble, Director of Community Outreach – Black River Healthcare, Inc. to discuss SE VIEW "Promoting Good Health Across the Lifespan in Williamsburg County". January 2011; Ms. Mack talked with Ms. Barbara Brooks, CEO of Black River Healthcare, Inc. about the SE VIEW grant and the desire to work with their three sites in Williamsburg County. Ms. Brooks scheduled a meeting for me to meet with Dr. Beryl Keith, Medical Director and Ms. Felicia Miller, RN and Director of Clinical Services on January 13th. January 2011 Mr. Singleton met with Mrs. Janice Gamble, Director of Community Outreach for Black River Healthcare, Inc. to discuss the facility's community involvement and how both MUSC and Black River could collaborate, dates of upcoming health fairs and community events. January 2011 Dr. Keith was interested in our program and the participation of the three sites based in Williamsburg County. When asked how many new patients their facility could accommodate from, the indication was that they did not anticipate difficulty providing care for all needs identified. Dr. Keith and Ms. Miller noted some basic services were missing or inadequate at their facilities and in Williamsburg County e.g., a Nutritionist, Social Worker, and sdrvices for patients needing assistance with mental health assistance. When asked for the most common reasons for patients missing appointments, it was due to lack of transportation, not wanting t miss work, or lack of money to pay for transportation.	b a b c
Kingstree Family Practice, Dr. Raymond Allen. January 2011; Dr. Egan and Ms. Mack met with Dr. Raymond Allen regarding the SE VIEW program and discussing his willingness to participate. Ms. Mack has stopped by his practice bi-weekly, recently met his Family Nurse Practitioner.	a, b
Live Oak Medical Center. January 2011 Dr. Egan and Ms. Mack met with Ms. Danielle Poston, Office Manager for Live Oak Medical Center. They have two practices, one in Kingstree, SC (Williamsburg County) and the other in Lake City, SC (Florence County). We shared information with her and scheduled a follow to meet some of the primary care providers in February. February 2011; Dr. Egan and Ms. Mack met with Drs. Ernie Atkinson, Robert Ellis, some of the nurses and triage staff from Live Oak Medical Center. We shared information about the SE VIEW grant and how we might partner with their practice site to improve outcomes. The site has an electronic medical record system. Drs. Albert Mims and Teneisha Davis were at the site in Lake City, SC. Patients from Williamsburg County are seen at both sites. Ms. Mack scheduled a follow up visit.	a, b c
Williamsburg Regional Hospital January 2011 Drs. Egan and Laken and Ms. Mack met with Mr. Mitch Monsour, interim CEO of Williamsburg Regional Hospital and Mr. Jim Allen, Network Consultant for **South Carolina Office of Rural Health** . Mr. Stanley Pasley, County Supervisor suggested to Mr. Monsour that he meet with us to discuss the SE VIEW program and the hospital's involvement. In addition, Mr. Monsour wanted to share the recent changes and	a,b

services added to the hospital and how he viewed us as partners. Mr. Jim Allen from the SC Office of Rural Health was also interested in our program and how Rural Health may be a partner as well. February 2011; Dr. Egan, Ms. Mack, Mr. Singleton and Ms. Lewis met with Dr. Harry Floyd, Retired Physician and Board Member Williamsburg Regional Hospital, Ms. Carol Evans, Chief Nursing Officer, and Ms. Karen Segars, Community Outreach Nurse of Williamsburg Regional Hospital in Kingstree, SC. Hospital officials explained what resources are being implemented, what they are doing to improve on public relations and image of the hospital. Dr. Egan made a presentation about building coalitions and partnerships for implementation of the SE VIEW program in Williamsburg County. A second meeting was scheduled for the following month. March 2011; Dr. Egan, Ms. Lewis, Mr. Singleton and Ms. Mack had a follow up meeting at Williamsburg County Regional Hospital with their representatives, Dr. Harry Floyd, Retired Physician and Board Member, Ms. Carol Evans, Chief of Nursing, Ms. Karen Segars, Community Outreach Nurse. Ms. Evans discussed what the hospital is doing to build a better relationship with the community, which include a rural clinic (possible location Hemingway, SC) to help individuals who may underinsurance or uninsured. The hospital purchased a case of DASH for Good Health Southern Style cookbooks to be used as giveaways and/or employees. Dr. Egan also had opportunity to give an overview of quarterly newsletter and O'QUIN report. March 2011; Ms. Mack spoke with Ms. Carol Evans, Chief Nursing Office has spoken with the Chef in the Hospital Cafeteria, and he has agreed to feature a recipe biweekly or monthly. They have also agreed to promote the recipes and DASH cookbook during Hospital Week in May 2011. May 2011; Ms. Mack, Mr. Singleton and Ms. Lewis attended Open House at Williamsburg Regional Hospital in Kingstree, SC. In honor of Hospital Week, we provided guests and staff with a sample of the mini carrot muffins prepared by Ms. Connie Washington, Owner of Connie's Bakery & Specialty Shoppe. The recipe was taken from our DASH for Good Health Southern Style cookbook, and the muffins received rave reviews by guests and staff.	c c c e
Hemingway Family Pr actice, Hemingway, SC. April 2011; Ms. Mack visited Hemingway Family Practice in Hemingway, SC office of Dr. Thomas Crosby and has scheduled a follow up visit to discuss the SE VIEW grant and O'QUIN.	a, b
Andrews Medical Center, Andrews, SC. March 2011; Dr. Egan and Ms. Mack visited Andrews Medical Center and met with Ms. Liz Johnson, Office Manager to discuss the SE VIEW grant and O'QUIN. A follow up meeting is scheduled with Dr. B. Lee Jones. May 2011; Dr. Egan and Ms. Mack visited Andrews Medical Center and met with Dr. B. Lee Jones, and his staff (PA and NP), discussed OQUIN, EHS, and SE VIEW. The practice has interest in joining OQUIN and welcomes assistance in purchasing and implementing an electronic health record system (EHRS). We then connected Andrews Medical Center with One Partner, which is a subsidiary of large multi-site practice in Kingsport, TN, that assists practices through the transition process to an EHRS.	a, b c
Rural Health Committee, March 2011; Ms. Mack has requested a meeting to present SE VIEW to the Rural Health Committee, need to follow up.	a
SCHOOLS: (a) Initial Contact, (b) Initial Meeting, (c) Follow-up (d) Presentation (e) Activity/Event	

First Steps Program in Hemingway, SC. In October 2010, County Councilwoman Jeannie Brown Burrows invited Ms. Sheryl Mack to talk with 25 parents of children in pre-kindergarten at Waccamaw EOC First Steps Program in Hemingway, SC; Mr. Darin Singleton and Ms. Pat Lewis observed as part of training. Topic of discussion was the importance of good nutrition and physical activity for them and their children. We shared information about the DASH for Good Health Southern Style Cookbook and the DVD Shopping Guide. Each parent received a copy of the previous version of the cookbook, a DVD shopping guide and the website address for accessing the most recent information and publications. They received handouts with a 7-step plan to cut their risk for stroke and heart disease in half. Ms. Mack allowed time for Q & A session and comments.	d, e
Lane Head Start Program, Lane, SC. In October 2010 Ms. Mack was invited by Ms. Shelia Smith, Nutrition Director serve as presenter to 40 parents and staff members at Lane Head Start Program Parent's monthly meeting in Lane, SC. The facility provided a "Cooking with the Chef" model demonstration using four recipes from our program's DASH for Good Health Southern Style Cookbook. As the Chef prepared the recipes, presentations were made about each recipe, the importance of food storage/preparations and developing healthy eating habits. Parents were given a sample of each prepared dish and a copy of the recipe, comments were favorable. A discussion was held about increasing physical activity with their children and the importance of parental participation. Mr. Singleton and Ms. Lewis attended as part of employee training, we learned that BMI measurements are collected on each child by the Center's nurse and nutrition director. Parents are notified of their child's BMI results in a letter, a private meeting is scheduled by request to explain and discuss recommendations.	d, e
Chavis Early Head Start Program, Hemingway, SC. In November 2010 County Councilwoman Jeannie Brown Burrows invited our group to attend Chavis Early Head Start Program Health Advisory Committee Meeting for observation purposes, Hemingway, SC. Mr. Darin Singleton and Ms. Pat Lewis attended the meeting. Our staff was introduced to health professionals, family service workers, center coordinators, and other members of the health community; meeting is held twice a year with focus on the Head Start Centers located in several counties, including Williamsburg. Ms. Lewis is securing follow-up visits with the Hemingway Head Start program; Ms. Lewis knows many of the parents and has a positive working relationship with them due to her previous employment.	b c
Hemingway Schools. Ms. Lewis is building relationships with the principal and staff at schools in Hemingway, SC. At the request of County Councilwoman Jeannie Brown Burrows, Ms. Lewis has attended community programs held at the schools in an effort to meet, greet and engage community stakeholders. Through these meetings, Ms. Lewis has begun building relationships with administrators and faculty of schools in Hemingway, SC and surrounding areas and sharing information about the health promotion – disease prevention program. These individuals include but are not limited to Coach Owens at Hemingway Middle School; Mr. Levi Keith, Principal Hemingway High School; Ms. Cynthia Brown, Principal Hemingway Elementary School; Ms. Erica Barcoo's, Principal and Coach McFadden of Hemingway Middle School; Ms. Cribb, Principal McLaurin Elementary School (physical activity program called 20,000 mile journey) Florence County; Ms. Hugee, Manager Early Head Start and Ms. Lisa McCray, Family Advocate Early Head Start in	a, b, c

Hemingway, SC.	
Williamsburg County Schools. In August 2010, Ms. Sheryl Mack met with the Superintendent of Schools for Williamsburg County, Dr. Jefferson-Barnes at District Headquarters in Kingstree, SC to provide an overview of the program. She thought it was a good program. Dr. Jefferson-Barnes suggested that Ms. Mack contact Ms. Valerie Mouzon, Director of County School District Foodservice employees to inquire about participating in a countywide workshop prior to school openings. Dr. Jefferson-Barnes previously invited Ms. Mack to conduct a workshop with the school district foodservice employees prior to beginning the school year (August 2010), during the March 2011 meeting she asked for an update. Ms. Mack provided an oral report and informed the Superintendent that Dr. Egan granted permission to provide each foodservice employee with a complimentary DASH for Good Health Southern Style cookbook and DVD Shopping Guide. She was advised that a follow-up training is currently being discussed with the foodservice director. Ms. Jeannette Jordan, our nutritional consultant will be asked to conduct the workshop and Dr. Jefferson-Barnes will be notified once confirmed.	b, c
Ms. Mack contacted Ms. Mouzon as directed by the Superintendent and participated in a workshop with 80 Williamsburg County School District Foodservice employees in Kingstree, SC. DASH for Good Health Southern Style Cookbook, DVD Shopping Guide and BMI (Body Mass Index), hypertension, diabetes, nutrition and physical activity were topics of discussion. It was an interactive session and we did some physical activity, some calculated their BMI (I bought a weight scale) and we learned stroke warning signs. Each employee received a copy of the cookbook and DVD shopping guide. Plans are scheduled for August 2012 in which Pastor Jeannette Jordan, author of the cookbook, certified nutritionist and diabetic educator will participate as the guest speaker.	d, e d, e
In March 2011, Dr. Brent Egan, Ms. Lewis, Mr. Singleton and Ms. Mack met with Dr. Jefferson-Barnes to further discuss potential partnership with the school district. During the meeting, Dr. Egan expressed the team's desire to work with teachers, students, staff, parents and the involvement of schools in the project; the objectives include better nutrition and increased physical activity. Dr. Barnes indicated that district resources were extremely tight and that reduction in the number of schools and staff was likely. Therefore, funding to support collaborative efforts was essential. She was encouraged to learn that our SE VIEW project included support for two fulltime staff living in the community as well as stakeholder and small grant funds that would become available for health promotion and disease prevention activities after regulatory approval. Dr. Egan described the regulatory process: the Medical University of South Carolina (MUSC) Institutional Review Board (IRB) and the funding agency Department of Defense (DOD/USAMRMC ORT) re**g**ulatory review process. He explained how it impacts when and how we may be allowed to work with schools.	
Dr. Egan asked Dr. Barnes about the possibility of introducing recipes from DASH for Good Health Southern Style cookbook at Parent Teachers Students Association (PTSA) meetings, school-based lunch programs, school-based nurses programs and/or other school-based community programs as suggested and approved by the Superintendent. Dr. Jefferson-Barnes thought the greatest impact may be among elementary, junior high, JROTC, and perhaps athletic students. When we inquired about the possible interest of math, science, health and physical activity classes, she answered in the affirmative and agreed that perhaps the teachers and students may be interested in creating projects that could be used for competitive math, science and health fairs. Some grade levels may be interested	

in a community garden or something similar. We discussed possible outcomes that could be gained by the school district, its teachers, staff, students and surrounding communities. Dr. Jefferson-Barnes welcomed the possibility of a partnership and asked each of our team members to define the scope of their work and areas of the county each would be responsible for: Ms. Lewis (Hemingway, Stuckey, Nesmith, Indiantown, etc.), Mr. Singleton (Greeleyville, Lane, Salters, Trio, Blakeley, Gourdin, Andrews, etc.) and Ms. Mack (Kingstree, Cades, Hebron, Millwood, St. Mark, etc.). Ms. Mack is building relationships and coalitions with current and former School Board members: Reverend Henryhand, Reverend Gamble and Dr. Zucker; Educators: Dr. Wright, Principal, Ms. Sarah Boyd, former Principal of St. Mark Elementary; Ms. Gardner, Principal; Ms. Regina Scott McKnight, and Mr. Phillip Holmes; District Employees: Dr. Yvonne Jefferson-Barnes, Superintendent of Schools, Ms. Joan Fulton, Executive Assistant to Superintendent, Ms. LaDine Gamble, Parent, Student and After School Coordinator; Ms. Valerie Mouzon, Director Foodservices; Dr. McGinnis, President of Williamsburg Technical College, Dr. Eric Brown, Ms. Geraldine Shaw, Mr. Charlie Etheridge and many viable and productive retired educators: Ms. Julia McFadden, Ms. Sarah Miller Cooper, Ms. Ica Bell Barr, Ms. Angela Bull, Ms. Jackie Robinson, Dr. Columbus Giles, Ms. Ann Bartelle; and Mr. William Bartelle. Ms. Mack has called or visited with 98% of the people listed here and am excited about the opportunities for partnerships once the regulatory process is resolved. Superintendant and Principals. During the 2nd quarter, Dr. Marilyn Laken met with the Dr. Jefferson-Barnes, District Superintendent of Schools, Dr. Teresa Wright, Principal of W. M. Anderson Primary School, Ms. Sarah Boyd, Principal of St. Mark Elementary School and Mr. Lee Roy Campbell, Principal of Cades-Hebron Elementary School to discuss previous work with the schools, share preliminary results and request permission for completion of a project funded by the Duke Endowment, which was implemented prior to Dr. Barnes' tenure. Mr. Singleton is strengthening contacts in his area (west and south Williamsburg County) including Mr. Michael Scott employed by Williamsburg Technical College (Kingstree, SC). Mr. Scott is an ETS Counselor and serves as a Counselor to students at D.P. Cooper Elementary School in Salters, SC. Mr. Singleton is also strengthening relationships with Mr. Sam Giles, Principal of Greeleyville Elementary School, Dr. Janice Gamble, Principal C.E. Murray High School; Mr. Kerry Singleton, Principal D.P. Cooper Elementary School; Mr. James Darby, Retired Educator.	a, b, c b, c
Williamsburg County Parent Teacher Association (PTA). Ms. Mack was given contact information for Ms. LaDine Gamble to learn about the County PTA.	a
W. M. Anderson Primary School, Cades-Hebron Elementary, St. Mark Elementary. February 2011. Shannon Hudson, RN, MSN, met with school nurses from the three schools to learn about problems associated with obesity and any data they collected on BMIs; Dr. Laken supervised Ms. Hudson's work in the schools. Ms. Hudson (all three elementary schools), Ms. Mack (W.M. Anderson Primary School), Mr. Singleton (Cades-Hebron Elementary School) and Ms. Lewis (St. Mark Elementary School) each participated as observers in focus group discussions under the Duke Endowment grant as part of their orientation to conducting future focus group discussions relative to the SE VIEW grant. Following the Focus Group with Dr. Laken and Ms. Hudson, we were informed of the	a, b, d

potential for St. Mark Elementary and Cades-Hebron Elementary schools to close at the end of this school year.	
C. E. Murray High School, Greeleyville, SC. Mr. Singleton participated in a Community Health Fair held at C.E. Murray High School. He had a table display with the following information: DASH for Good Health Southern Style cookbooks, DASH DVD Shopping Guides, Handouts/Bookmarkers. He gave a brief informal presentation to individuals and groups. During the event he met many key community stakeholders from various churches, fraternities, sororities, and civic organizations. In April 2011, Ms. Mack, Mr. Singleton and Ms. Lewis participated in a school district 1st annual sponsored program, "A Family Institute" held at C.E. Murray High School. The event focused on health awareness, obesity, bullying, parenting, child neglect and abuse. We provided fresh whole fruit, handouts, displayed our DASH cookbook and DVD shopping guide. The event attracted ~130 adults and children of all ages. Pastor Jeannette Jordan, who is also a masters' level dietician and a nutritional consultant on our project, participated in the workshop sessions.	d, e d, e
W. M. Anderson Primary School, Kingstree, SC. Dr. Wright, principal, and his staff hosted a community night for their student's parents and grandparents; local agencies and health organizations were allowed to make 3-5 minutes presentations and/or disseminate information. Ms. Mack shared a table with Ms. Karen Segars, RN Community Outreach Coordinator for Williamsburg Regional Hospital and used the opportunity to meet and greet the community.	d, e
Williamsburg Technical College, Kingstree, SC. Mr. Singleton had several meetings and discussions with Dr. Brown and other key faculty at Williamsburg Technical College. Those interactions led to a meeting in May 2011 that included Dr. Egan, Mr. Singleton, Ms. Lewis and Ms. Mack met with Dr. Eric Brown, Dean of Student Services, Ms. Geraldine Shaw, Director of Upward Bound and Mr. Charlie Etheridge, Director of ETS (Educational Talent Search). During the meeting, an overview was provided of the SE VIEW health promotion – disease prevention program. We listened and learned how the College operates within and connects with the community. Mrs. Shaw said a health summit is in the planning phase and they would welcome our participation, This is an annual event that is very well attended by the community-at-large. They would like to insure that students with a science, nutrition, physical fitness and medical background attend and participate. Ms. Shaw is considering the DASH cookbook as a teaching tool for nutrition students and likes the idea of serving a meal prepared from the cookbook for the community health event. We explained that we are awaiting regulatory approval, and that we are excited about the opportunity to partner with them. The College was particularly interested in establishing a multi-stakeholder medical advisory group, developing student health survey tools and applying for a mini grant following regulatory approval.	b, c
WORKSITES: (a) Initial Contact, (b) Initial Meeting, (c) Follow-up (d) Presentation (e) Activity/Event	
Connie's Bakery & Specialty Shoppe: ***A Success Story.*** Ms. Mack presented Connie, Owner of Connie's Bakery & Specialty Shoppe, with a DASH for Good Health Southern Style Cookbook in January 2011. Connie was asked to look through the cookbook to see if there	a, b, c

was a recipe that she was willing to try. Ms. Mack visited her business every other week to inquire if she had found a recipe to try? She initially responded about how busy she was but that the recipes looked great! Ms. Mack would always smile and respond that she would be back. On the next visit, as soon as Mr. Mack walked in, Connie said there are so many things in the cookbook that I want to try; I'm having a hard time deciding! Ms. Mack indicated that our program would be looking to have the public sample some items. We would like to do business with her if possible.	e
Ms. Mack took Dr. Egan by in March 2011 to show him her business establishment.	
Ms. Mack returned three weeks later, and Connie was very excited. She had tried the Seafood Salad from our cookbook and it was very popular; no one else was selling such a product. Next, we commissioned her to bake some mini carrot muffins for the Williamsburg Regional Hospital Open House, and people loved them.	e
Congressman Clyburn came to Hemingway, SC, to address the county about health care concerns. We again provided muffins from Connie's, and people enjoyed them. We donated some of the muffins to the Boys & Girls Club.	d,e
On June 26, Dr. Brent Egan is the guest speaker during the 10:00 am worship service at Mt. Zion United Methodist Church in Kingstree, SC. Connie is preparing sweet potato pie using recipe the from the DASH cookbook, which the congregation will have an opportunity to sample. Ms. Connie Washington is a young woman of color. She has a great reputation and can make a real difference in the community in showing people that their favorite foods can taste great and be healthy too. So, if you're ever in Kingstree, look for Connie's Bakery and her version of the **DASH for Good Health Southern Style**!	
Trebol USA, Andrews, Sc. August 2010, Mr. Mark Morelock, Production Manager for Trebol, USA saw a copy of DASH for Good Health Southern Style cookbook and contacted Ms. Sheryl Mack to purchase a few additional copies. Once we spoke by phone, we learned it was an earlier version and I had researched the company and found that it was on the county line of Williamsburg and Georgetown. The company administrators were community service oriented. I delivered the cookbooks and requested a meeting with Mr. Morelock. The Plant Manager, Mr. Chris Fischer attended the meeting also and I surprised them both when I spoke of the company's offer to donate the amount of food in pounds to a local food bank that the employees collectively lost in a weight-loss challenge, it was tons. During the meeting, I learned that 90% of their workforce was from Williamsburg County and I immediately told them about the health promotion – disease prevention program; we discussed the concept of our program and they explained the many health and wellness promotion initiatives and incentives they had for their employees.	a, b, c c
A follow-up invitation was extended to return and present to the employees during October's monthly meeting. Ms. Mack returned and Mr. Darin Singleton and Ms. Pat Lewis accompanied her as a part of their orientation. A presentation was made to 50 employees on day shift. Topics discussed included diabetes, hypertension, good nutrition, physical activity and access to quality care and medication. This worksite has implemented several incentive bonus programs that encourage employees to adopt healthy lifestyles. Each month, a healthy lunch is catered using recipes from our DASH for Good Health Southern Style cookbook. Blood pressure cuffs and weight scales are available for all interested employees to use. In addition, they have a health message board that correlates with each month's theme. Employers also host an annual health screening day each year. The worksite purchased a DASH cookbook for each employee. Plant administration was	c

interested in partnering with us in our project and is a great model for other worksites to emulate. Ms. Mack, Mr. Singleton and Ms. Lewis presented again in November (Diabetes Month). The meeting was combined with a safety meeting that the Plant Manager, Chris Fischer conducted. Ms. Melissa Cormany is the new contact for Trebol, USA, following Mr. Morelock's departure. She requested a speaker for February 2011 (Heart Month). February 2011. Mr. Singleton discussed hypertension, diabetes, risk factors, health consequences, and prevention with Trebol employess. He provided a fact sheet and additional handouts were given to each employee, Ms. Lewis accompanied him. March 2011. Dr. Brent Egan, Ms. Mack, Mr. Singleton and Ms. Lewis visited Trebol USA. We met with Gary Gabriel and Cathy Graham to discuss future plans and to address questions management may have with regards to the annual employees health screening tentatively scheduled for April 20. We learned that the Plant is in the process of establishing a Health Advisory Committee. Dr. Egan complimented them on their monthly programs and the idea of empowering their employees to develop or maintain good health habits. He also commented on the incentive programs that they initiated to improve participation. Dr. Egan explained that while we enthusiastically welcome the opportunity to collaborate with them, we are still awaiting completion of the regulatory process.	c, d c
Williamsburg County. November and December 2010. Ms. Mack called requesting a time to meet with Mr. Pasley. January 2011; Dr. Egan, Ms. Mack, Mr. Singleton and Ms. Lewis met with Mr. Stanley Pasley, Williamsburg County Supervisor in Kingstree, SC. It was an introductory meeting to discuss an overview of SE VIEW and our specific program, "Promoting Good Health Across the Lifespan in Williamsburg County". Dr. Egan spoke of the program's purpose, core objectives, target groups and a desire to work with the community to build coalitions. He indicated that the first step made to demonstrate our commitment to the county and community was hiring two full time individuals from within the county/community, Mr. Singleton and Ms. Lewis. He also told him that Ms. Mack was born and grew up in Kingstree, Mr. Pasley was aware of that fact, and he recognized Mr. Singleton. He and Ms. Lewis knew many of the same people in her community. We asked for his support and a potential partnership with the county and he welcomed us. He also knew Dr. Sabra Slaughter and Mr. David Rivers and had heard about SE VIEW but was unaware of program details. Mr. Pasley provided a brief overview of the county's fiscal state, which included the impact of reduced funding, potential further loss of revenue due to closure of companies and businesses, and further job loss for many in a county already known as one of the poorest in the state. While the county faces many challenges, he remains optimistic, determined and committed to all resident. Mr. Pasley is developing strategies to continue delivery of existing services and improving environmental conditions for those living in the most rural and underserved areas. He shared his extensive work experience prior to becoming County Supervisor. He understands chronic illnesses, the burden it can place in a county budget, and the importance of healthy workforce and community. He asked many questions relative to the project and wanted to know what it meant for Williamsburg County and its future. He offered his assistance in providing key contacts, indicated his willingness to help in organizing the county, and welcomed more attention to prevention and intervention programs to improve health. Ms. Mack has kept communications open with Mr. Pasley, and he has invited her to speak	a, b, c c

to the Benefit Coordinator regarding getting the county involved as worksite partner.	
Tupperware, Hemingway, SC. Ms. Pat Lewis contacted Ms. Carolyn Lewis, Human Resource Assistant at Tupperware Plant to request a meeting with company representative to discuss SE VIEW program. Ms. Lewis recommended that a written request be sent asking to meet with Mr. DeJuan Hinson, Human Resource Manager and Ms. Mary Powell, Plant Nurse. Ms. Pat Lewis complied with request and the meeting was scheduled. March 2011, Ms. Lewis and Mr. Singleton met with the Ms. Hinson, Human Resource Manager and Ms. Powell, Plant Nurse at Tupperware in Hemingway, SC. During the meeting, it was determined that the Tupperware Plant had a fully equipped gymnasium for employees, which is open twenty-four hours each day. The Plant has a walking path around the perimeter, which marked to allow employees to know the distance they have walked. And, the Plant has a staff nurse (RN). Health promotion was discussed, and we found they have established programs within their own facility to target obesity and incentive programs to encourage their employees. Mr. Hinson, the Human Resource Manager, and Ms. Powell, Plant Nurse, were both given a copy of the DASH for Good Health Southern Style cookbook and DASH DVD Shopping Guide. Ms. Lewis is talking with Ms. Powell, Plant Nurse regarding purchase of cookbooks for the employees. May 2011, Dr. Egan, Ms. Lewis, Mr. Singleton and Ms. Mack toured the facility, gym and exercise room. Dr. Egan discussed the SE VIEW grant and our program's desire to partner with them as a worksite. Tupperware is continually promoting use of the gym and exercise room. The Plant is hosting a health fair in August. Ms. Powell spoke of upcoming events to promote health and wellness, and invited our group to play an active role. We expressed our enthusiasm for collaboration and explained that we are awaiting regulatory approval to begin.	a b c
Lane Manufacturing, LLC, Lane, SC. April 2011; Mr. Singleton contacted Lane Manufacturing, LLC in Lane, SC to request a meeting. May 2011; Mr. Singleton met with Ms. Sharon Chandler, Human Resource Manager at Lane Manufacturing, LLC to discuss the health promotion – disease prevention program. Ms. Chandler stated that currently the plant does not have a health program it would have to originate from the Corporate Office. The only incentive they currently offer to employees is health care insurance. Mr. Singleton left some materials with her and is to follow up in one month. June 2011 Mr. Singleton met with Ms. Magaret Mitchum, Plant Manager of Lane Manufacturing, LLC, to discuss the countywide health initiative.	a, b
Trustees Farmers Telephone Cooperative, Kingstree, SC. May 2011; Mr. Singleton met with Mr. Newell Myers, President of the Board of Trustees to discuss countywide health initiative and to determine if employees have a health and wellness program.	a, b
Wise Company, Greeleyville, SC. May 2011; Mr. Singleton met with Mr. Bob Blenis, Plant Manager, to discuss the health initiative and obtain information about company and employees.	a, b
Wilder Brothers Furniture Company, Greeleyville, SC. June 2011; Mr. Singleton met with Mr. Gerald Wilder, Owner of Wilder Brothers Furniture Company. Mr. Wilder informed Mr. Singleton that it is a 70 years old family business. Most of his employees are	a, b

in good health. He provides health care insurance. His furniture movers are required to take an annual physical. Mr. Wilder purchased a DASH cookbook and accepted 10 handouts containing health messages.	
Stuckey Brothers Parts, Hemingway, SC. June 2011; Ms. Lewis stopped by Stuckey Brothers Parts in Hemingway, SC and met with Ms. Bonnie Stuckey, Co-Owner. Ms. Lewis learned that the company has 45 full-time employees. The company offers health insurance but only 30% of workers accept it. Ms. Lewis is to follow up by mid –June to schedule a time to meet and discuss the health care promotion – disease prevention program, SE VIEW.	a, b
Stuckey Brothers Furniture Company, Hemingway, SC. June 2011. Ms. Lewis stopped by Stuckey Furniture and spoke with Mr. Bill Stuckey, Co-Owner. The store employs 7 full time and 3 part-e staff, all employees has health insurance, Ms. Lewis sold 13 DASH cookbooks. Mr. Stuckey said he would speak with his brother regarding partnering with our health initiative. He requested an additional 8 DASH cookbooks.	a, b
Stuckey Brothers Farm Supply, Hemingway, SC. June 2011. Ms. Lewis spoke with Mr. Tradd Stuckey, a salesman for Stuckey Brothers Farm Supply. Ms. Lewis was given the telephone number for Mr. Jimmy Stuckey, Human Resources contact, he is currently on vacation. The company employs 6-9 people but does not offer health insurance. Mr. Tradd Stuckey states that if an employee has to go to the doctor and cannot afford to pay the bill, the company loans the employee the money and recoups the money from the employee's paycheck.	a, b
Brown's Bar-B-Queue. Ms. Mack contacted a popular local restaurant, Brown's Bar-B-Queue to inquire if they might consider featuring a recipe from the DASH cookbook (weekly, bi-weekly, or monthly). Ms. Brown said she would discuss it with her husband.	a,b
MISCELLANEOUS: (a) Initial Contact (b) Initial Meeting (c) Follow-up (d) Presentation (e) Activity/Event	
Trident United Way for Williamsburg, Georgetown and Horry Counties in Georgetown, SC November 2010 Ms. Mack was invited to meet with Trident United Way for Williamsburg, Georgetown and Horry Counties in Georgetown, SC to discuss health promotion – disease prevention program for Williamsburg County. Mr. Fischer of Trebol, USA was responsible for the invitation.	a
Hemingway Homecoming Parade, Hemingway, SC. Ms. Pat Lewis attended Hemingway Homecoming Parade in Hemingway, SC and disseminated health information handouts.	d,e
Greeleyville Homecoming Parade, Greeleyville, SC. Mr. Darin Singleton attended Greeleyville Homecoming Parade and disseminated health information handouts.	d,e
Interagency Council of Williamsburg County. Ms. Mack contacted Mr. J. J. Castle, the Immediate Past President of the Interagency Council of Williamsburg County. A presentation was tentatively scheduled for February 2011; Ms. Regina Nesmith changed the presentation date to January 2011. February 2001; Mr. Singleton, Ms. Lewis and Ms. Mack attended the monthly Interagency Council meeting at Williamsburg County Library in Kingstree, SC. Presentation was given	a b

by Mr. Joe Castle and staff from Department of Juvenile Justice for Williamsburg County. March 2001 Mr. Singleton and Ms. Lewis attended the monthly Interagency Council meeting held at the Williamsburg County Library in Kingstree, SC. Mr. Lou Palm from the Coastal South Carolina Chapter of the American Red Cross was the guest and provided information as to the work being done in Williamsburg County. All agencies provided updates.	c
Boys and Girls Club, Hemingway, SC. February 2011; Ms. Lewis contacted Boys and Girls Club, Hemingway, SC to schedule a time to meet and discuss program with Mr. Andre Dorsey, Executive Director. Dr. Egan, Ms. Lewis, Mr. Singleton, and Ms. Mack met with Mr. Andre Dorsey, Executive Director of the Boys & Girls Club in Hemingway, SC. Mr. Dorsey gave the team a tour of the facilities and explained the different resources that the club has to offer including tutoring, arts, crafts, and extracurricular activities. Mr. Dorsey also showed the team their community garden and gymnasium which is named for Congressman James Clyburn, the computer rooms, the recreational rooms, quiet time room. We were able to observe the interaction of the children and youth.	a,b
Vital Aging of Williamsburg County. Mr. Singleton contacted staff at Vital Aging of Williamsburg County and **The Kennedy Center** programs to gain information about programs for senior citizens. Mr. Singleton did a presentation there on improving one's health and the importance of movement in Greeleyville, SC.	a, b, c, d
Mr. Singleton met with Mrs. Debbie Burrows and Mr. Robert Welch of Vital Aging. Mrs. Burrows serves as Director of the Wellness Centers and Mr. Welch is the Executive Director for Vital aging. He explained that the SE VIEW program is working to improve health across the lifespan in Williamsburg County. Ms. Lewis joined Ms. Segar's, Williamsburg Regional Hospital Community Outreach Nurse at Vital Aging in Hemingway, SC. Ms. Lewis promoted SE VIEW and sold some DASH cookbooks.	a
Trio Community Action. Mr. Singleton attended the Trio Community Action monthly meeting. This committee holds monthly meetings and allows a guest speaker each month. Mr. Singleton will be the guest speaker for the month April. Mr. Singleton met with Mr. Nathaniel Myers, Jr. a retired educator and community activist about having a health fair in the Trio-Blakely communities of Williamsburg County. Mr. Myers serves as the CAST (Community Action for a Safer Tomorrow) Coordinator, a program designed to educate and prevent alcohol abuse and alcoholic fatalities in Williamsburg County. He has purchased a number of cookbooks from Ms. Mack and Mr. Singleton for his employees at Williamsburg County Alcohol and Drug Abuse. In May 2011 Reverend Alice Wright has asked Mr. Singleton to become a health liaison for Trio Community Action.	a, b, c

B3f. **<u>Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population</u>**
Director: Jacobo Mintzer, MD, Professor, Department of Neurosciences
Goals: Investigate underlying factor(s) contributing to the fact that Alzheimer's disease (AD) afflicts more African Americans than whites; develop knowledge and interventions that will help close this gap
Distinguishing Characteristics: SC's elderly population is diverse and largely rural, while most physicians trained to provide geriatric care are concentrated in a few urban areas. For evaluation, diagnosis and appropriate treatment for AD and other neurodegenerative diseases of aging, the situation is critical. This initiative uses telemedicine to meet healthcare needs, improve healthcare delivery

systems, and ultimately reduce health disparities in rural African Americans.
Summary of Activities: Hired Program Coordinator; evaluated technical compatibility and interfaces between the MUSC and varying online systems at SE VIEW sites; assessed needs to achieve required levels of confidentiality at private care settings; completed design medical assessment instruments and initiated plan for implementation in a web environment; entered negotiations for partnering agreements; and completed 'marketing plan' to engage additional provider-partners.

The rapid and steady raise in the prevalence of dementia is a major public health problem. This is especially true for South Carolina, where, according to the 2007 Annual Report of the SC Alzheimer's Disease Registry[30] the number of dementia cases is expected to increase from approximately 50,000 in 2005 to over 90,000 by the year 2030. South Carolina is home to a large African American elderly population concentrated primarily in rural areas. This population suffers from a lack of access to healthcare and is largely under-served medically. South Carolina follows national trends, with a higher prevalence of African Americans suffering from Alzheimer's disease when compared to White Non-Hispanics.[31-35] Despite the high prevalence rate among African Americans in South Carolina, however, very few African Americans are diagnosed and treated. Many of these issues are related to practical issues, such as difficulties in reaching diagnostic and treatment centers, and emotional issues, including lack of ability of the local trusted medical team to provide diagnosis and treatment for Alzheimer's disease, and the natural reluctance of the elderly subjects who have learned to be suspicious of the medical system after a lifetime of discrimination. Thus, we have focused our effort on the development of new methodology to diagnose subjects in their own environment, using telemedicine as a tool to overcome both the practical and emotional barriers to access to healthcare. The Specific Aims for this project are:

1. To utilize "Telemedicine," or video-conferencing, for evaluation and diagnosis of African Americans suffering from Alzheimer's disease and other cognitive disorders.
2. To explore the validity and reliability of this approach in the targeted population and determine its applicability in clinical practice by comparing Telemedicine diagnosis of Alzheimer's disease with in-person diagnosis of Alzheimer's disease.

The use of telemedicine video-conferencing will be beneficial to the early detection of Alzheimer's disease in the African American community, and this project will provide knowledge to health-care professionals and African Americans in rural communities in South Carolina about this novel diagnostic tool. It will also serve in developing a practical, standardized process for using telemedicine to diagnose Alzheimer's disease that can be implemented statewide and ultimately on a national level. Ultimately, this project will improve the ability for African Americans living in a rural community to seek medical evaluation of dementia-related symptoms.

Year one of this project has been utilized in completing all start up tasks necessary to the successful operation of this project. Before patients can be recruited and evaluated, a number of tasks needed to be accomplished. The tasks that have been accomplished throughout this first year, as well as challenges faced, are outlined throughout the following paragraphs.

An important step that was accomplished this year that was crucial to the progress accomplished in the first year was bringing a program coordinator on board to oversee the project. In addition to completing the tasks outlined in the following paragraphs, this coordinator has assumed responsibility for overseeing MUSC IRB and Telemedicine and Advanced Technology Research Center regulatory issues. The coordinator developed a participant recruitment and marketing plan to use for all partner sites. This plan is ready for implementation once all regulatory approvals are issued. The coordinator also established data flow schemes and constructed data forms in both electronic and hard copy. Throughout the next phase of the project, the coordinator will be responsible for implementing a state-wide system of subject ID numbers that meet HIPPA privacy standards, establish a mechanism to track data edits and

provide the longitudinal follow up data storage/retrieval consistent with the protocols of the NACC, and will act as the point of contact for all partner sites.

One area in which a great deal of focus has been placed throughout the first year is securing partner sites for the project. The first partner site has been identified as Andrews Medical Center in Andrews, SC. The physician partnering on this project will be Dr. B. Lee Jones. Federal Wide Assurance has been obtained for Andrews Medical Center to validate assurance of compliance with federal regulations for the protection of human subjects in research. Training certification has been completed for Andrews Medical Center research staff. Credentialing for members of the MUSC research team, Dr. Jacobo Mintzer and Beth Safrit, has been completed to allow for participation in research at Andrews Medical Center and was effective April 28, 2011. A contract draft between MUSC and Andrews Medical Center has been created and is under review through the MUSC general counsel.

In addition to securing Andrews Medical Center as a partner site, additional potential partner sites have been identified. The project team made a presentation to a potential second partner site, Black River Healthcare. The presentation was with the executive team of Black River Healthcare system including the Chief Executive Officer, Human Resources/Staff Development Director, Medical Director, Operations Director, Clinical Director of Services, Finance Director, and head nursing staff. Black River Healthcare is interested in this project, although there is some concern with the shortage of nursing staff on site to commit to this project. The project team is working with the Black River team to address this concern and establish an effective solution to this issue. It is possible that a similar challenge will be met at additional potential partner sites as well. Working through this concern with Black River will be beneficial as we approach additional sites. We anticipate finalizing the commitment and agreement with Black River Healthcare in the coming months.

Throughout the first year, the project team has collaborated with other SE VIEW programs, specifically the SC TeleSupport Diabetes Management Initiative, Tele-Critical Care Program to Reduce Rural Health Disparities, and Stroke Risk Reduction Initiative. Discussions with these programs included topics such as lessons other programs have learned, the capacity in which resources could be shared, and the potential to collaborate at similar prospective partner sites. Having a network of similar programs within SE VIEW has been valuable in learning about challenges other programs have faced, solutions that proved to be beneficial, and how we can address similar challenges in our project.

In addition to collaborating with fellow SE VIEW project leaders, other areas for research community collaboration have been pursued as well. The project coordinator recently attended a Sea Islands/Gullah Community Mini Retreat through the South Carolina Clinical and Translational Research Institute. The purpose of this retreat was to discuss simultaneous development of projects within the Sea Island/Gullah communities of South Carolina and to discuss project collaboration with other MUSC and state-wide researchers. This retreat was an opportunity to overview what has already been accomplished in this specific population, collaborate on future projects and communicate with the community about specific health needs and interests of the Sea Island and Gullah communities.

The project coordinator is also collaborating with the South Carolina Area Health Education Consortium to utilize resources already in place in rural hospitals and clinics in the targeted population areas for this project. This program has a network of at least 24 rural hospitals and facilities throughout South Carolina. We have identified 10 facilities that are in our areas of focus with the I-95 corridor and coastal counties. Collaboration with the South Carolina Area Health Education Consortium will provide even greater opportunity to reach those African American communities targeted in this project and to utilize existing teleconference equipment already in place in these facilities.

In preparation for patient evaluation and data collection to begin in year two, several accomplishments have occurred in the first year that will allow for successful recruitment and data collection. Marketing materials to include brochure and handout have been created for patient recruitment, and marketing

materials have been created for physician referral marketing. Examples of marketing material are provided in **Appendices 34-36**. Patient evaluation assessments have also been created and finalized and examples of these assessments are found in **Appendices 37-38**. Satisfaction surveys have also been created and finalized. Satisfaction surveys include patient satisfaction, caregiver satisfaction, partner site physician leader satisfaction, and partner site study staff satisfaction. Examples of satisfaction surveys are provided in **Appendices 39-40**.

The team worked with MUSC's Director of Academic and Research Systems to create the appropriate web based application to upload and store forms and scans of patients seen through this telemedicine project. All document and assessment transfers will take place through MUSC's Filelocker program. This program is secured with MUSC firewall and requires MUSC MNA access. The Filelocker program will allow private file uploading and sharing with only study staff with access as granted by MUSC. Only the MUSC Research Team and Partner Site study staff will have access to the equipment and materials transmitted via the telemedicine equipment and Filelocker.

Data collected from the assessments completed by the MUSC research team will be collected and analyzed through the Research Electronic Data Capture (REDCap) Database. REDCap is a secure, web-based application designed exclusively to support data capture for research studies. The RedCap Database specific to this project has been created and is undergoing final proofreading and testing to ensure appropriate access and use at the time patient evaluations begin.

In addition to the data collection measures that have occurred, other crucial pieces were accomplished in the first year as well. The team has identified the appropriate video conferencing equipment for this project (Tandberg Movi) with the help of MUSC's OCIO. Equipment has been purchased. Tandberg Movi was selected based on expense and ease of use. MUSC utilizes Tandberg Movi for other telemedicine projects. Using Tandberg Movi provides easier access to the system and onsite IT support through MUSC. When utilizing standards-compliant Multipoint Control Units (MCUs), Tandberg Movi will allow the MUSC Research Team to simultaneously connect with users at the partner site. Tandberg Movi also enables the user to select and share content and presentations with any standards-compliant video device. All communications will take place through the secure Tandberg Movi system.
Apple MacBook laptops have been selected and purchased in order to carry out this project.

One area of challenge for this project has been securing research approval from the MUSC IRB and the USAMRMC ORP. After discussing this issue with other SE VIEW program members, we felt some reassurance in the progress that we have made in the first year in learning that we were not the only program facing this challenge. The Protocol, informed consent, and HIPAA documents have been created for this project. The protocol has been through many revisions throughout the first year. An important area of focus when revising the protocol was ensuring a partner site was committed and in place so that the specific roles and responsibilities for MUSC research team and Partner Site team members could be defined. Having a partner site in place made an impact in the revisions to the protocol and was an important step in clearly defining the scope and design of the project.

Regulatory materials, to include Protocol, informed consent, and HIPAA documents, have been submitted to the USAMRMC ORP for preliminary review. The study is under review of the MUSC IRB and will move on to USAMRMC ORP review in June, 2011. Study approval is expected June or July, 2011. We look forward to beginning the next phase of this project in year two.

Key Research Accomplishments

Southeastern VIEW Administrative Core (SEVAC)

- **Communication/Coordination Activities:**
  - Monthly meetings of the SE VIEW PI with the MUSC President and Provost Established designated accounts
  - Bi-monthly meetings of the SE VIEW Executive Committee
  - Open forums on the MUSC campus and in SE VIEW communities, at least monthly on average, e.g., 'Grand Rounds,' 'lunch-n-learns,' special seminars, sponsored speakers, panel discussions, 'town meetings', etc.
  - Robust website development, maintenance and enhancement
  - Monthly SEVAC conference calls to review SE VIEW progress
- **Administrative/Fiscal Activities**:
  - Grants/contracts administration, human resources administration, business operations management and procurement
  - Monthly reviews of expenditure reports for accuracy and compliance with federal and institutional guidance
  - Regular reviews of activity and costs per initiative to identify under/overutilization of resources or disproportionate use of resources by any area, with additional review, adjustment or action as needed
  - Guidance and assistance to comply with all reporting requirements of DOD and other cognizant entities
- **Integrative Activities**:
  - Bi-monthly strategic planning reviews and sharing of 'best practices' for community engagement and coordinated communications in the locales that host the SE VIEW initiatives
  - Ongoing program assessment and evaluation within the overall SE Evaluation Plan
  - Continued leadership, visible participation and programming of annual National Conferences on Health Disparities

MUSC Public Information and Community Outreach (PICO) Initiative and Community Institutes for Traditional and Nontraditional Leaders

- **2010 Accomplishments**
  - Community Leadership Institutes (CLI)
    - Tougaloo/Jackson, MS CLI
      - Tougaloo College in Jackson, MS (August 20-21, 2010)
      - 114 in attendance
    - Johns Island, SC CLI
      - Wesley United Methodist Church Life Center on Johns Island, SC (October 15-16, 2010)
      - 133 in attendance
  - Technical Assistance Workshops (TAW)
    - Augusta, GA TAW
      - Pain College in Augusta, GA (August 28, 2010)
      - 45 in attendance
    - Burke, GA TAW
      - Augusta Technical College in Burke, GA (December 4, 2010)
      - 37 in attendance
  - Our Health Made-for-Television Dialogue
    - *Our Health: Overcoming Obesity*

        - Conducted at ETV in Columbia, SC (April 20, 2010)
        - 60 in attendance (live) – see reportable outcomes
    - Fourth Annual National Conference on Health Disparities 2010
        - Philadelphia Marriott Hotel Downtown - Philadelphia, PA - November 10-13, 2010 (650 in attendance)
        - Built upon three prior three national conferences on health disparities held in Charleston, SC; St. Croix, US Virgin Islands; and Atlanta, GA. Program-related efforts officially commenced, May 5-6, 2010, in Charleston, SC, with a planning session that convened 21 health care professionals, policymakers, and university faculty from across the nation to provide input on topic selection, expert panelists and prospective sponsors and supporters.
        - Program partners: Morehouse School of Medicine, Cheyney University, Drexel University School of Public Health, University of Pennsylvania School of Nursing, Lincoln University, Temple University School of Medicine, and the Congressional Black Caucus Foundation, Inc., in conjunction with The Congressional Black Caucus Health Braintrust and TriCaucus Health Task Force Chairs.
        - Addressed social determinants of health, including education levels, health literacy, poverty, public safety, community design, access to care, environmental quality, environmental justice, and personal, government and corporate responsibility. A partial list of presenters includes: Dr. John Ruffin, National Institute on Minority Health and Health Disparities; Ms. Melody Barnes, President Obama's Domestic Policy Adviser; Dr. Veda Giri, Director of Prostate Cancer Risk Assessment from Fox Chase Cancer Center; Dr. Howard Koh, Assistant Secretary for Health for the Department of Health and Human Services; The Honorable James E. Clyburn, U.S. Congress (SC-06); Ms. Lisa P. Jackson, Environmental Protection Agency Administrator; Dr. Denis Cortese, Director of the Office of Health Care Delivery and Policy Program at Arizona State University; The Honorable Donna Christensen, MD, U.S. Congress (Delegate for the U.S. Virgin Islands); The Honorable Chaka Fattah, U.S. Congress (PA-02); and Mr. Michael Rashid, President and Chief Executive Officer of AmeriHealth Mercy Family of Companies. Hundreds of conference attendees expressed that they learned new approaches and planned to disseminate the information in their workplaces and communities.
- **2011 Accomplishments**
    - Community Leadership Institutes (CLI)
        - New Ellenton/Jackson CLI
            - Silver Bluff High School in Aiken, SC (April 1-2, 2011)
            - 128 in attendance
        - Florence, SC CLI
            - Francis Marion University in Florence, SC (May 20-21, 2011)
            - 88 in attendance
        - Blackville, SC CLI
            - Clemson University Edisto Research & Education Center in Blackville, SC (July29-30, 2011)
            - Anticipated attendance = 120

<u>Health Careers Academy and Junior Faculty Development</u>

- **Health Careers Academy**
    - Students have an increased knowledge of:
        - Their respective career paths (dental medicine, medicine, nursing and pharmacy)

        - Requirements for admission to programs focused on health professions
        - Resources to support academic program retention and progression
        - The definitions, causes, maintenance and/or treatments of the four identified health-related topics
- **Junior Faculty Development**
    - Debbie C. Bryant, DNP
        - Doctoral project manuscript submitted for publication on April 25, 2011
        - Completed the DNP program: graduation held on May 20, 2011
        - Received an American Cancer Society Award: Graduate Scholar in Cancer Nursing Practice
        - Small community engagement grant in the amount of $10,000 funded by the South Carolina Cancer Alliance
        - Currently collaborating with Dr. Deborah Williamson (Associate Dean for Practice, College of Nursing) and Dr. Sabra Slaughter (SE VIEW PI; Chief of Staff, Office of the President) to develop the next step in faculty development
        - Currently developing the concept for a model program in community engagement for cancer prevention, control and outreach
    - Ida J. Spruill, PhD
        - An American Diabetes Association (ADA) Project Power Training Workshop was held on November 20, 2010. The purpose of the training was to enhance community capacity for controlling and preventing Type II Diabetes and identify faith-based ambassadors for implementation of the six ADA educational modules. The workshop hosted 35 participants from 15 churches throughout the Tri-County area.
        - Participation in the Fourth Annual National Conference on Genetics/Genomics on December 8, 2010. Presentation topic: *Embracing the Need for a Culturally Appropriate Pedigree Nomenclature for African American Families*
        - January 2011: Conduct focus groups to explore literacy among the Sea Island communities; understand the attitudes and perceptions regarding genetic research; explore the best format to promote genetic literacy; the data has been transcribed and analyzed, ready for dissemination
        - April 30, 2011: completed the NINR Developing Nurse Scientist Training (online)
        - June 7-13, 2011: attended the evidence-based seminar sponsored by the University of North Carolina at Chapel Hill and Greensboro

Stroke and Stoke Risk Reduction Initiative (SSRI)

A comprehensive quarterly listing of all aims, activities and accomplishments for this initiative are detailed in the Gantt chart provided as **Appendix 16**. The key accomplishments emanating from these aims are outlined below:

Aim I. Defined and characterized the primary regions of interest (ROI)

- Defined ROI *(see **Appendix 14**: Regions of Interest)*
- Completed preliminary REACH evaluation
- Collected/reported initial evaluative measures related to disparities
- Created Epidemiology Core *(see Aim IV below)*
- **NOTE: Current Aim I – COMPLETED.** Next year Aim I will be listed as "Program Administration," which is outline as Item VII below.

Aim II. Benchmark regions with & without REACH and evaluate the impact of telemedicine

- **Access to Care:**

- Evaluated access to expert stroke care pre-and post- REACH implementation: Hospitals identified, census data collected, and initial analysis completed/refined.
- Determined the number of residents with "access to expert stroke care."
- Presented initial findings at national conference *(see **Appendix 18**: Access Poster)*

- **Awareness of symptoms, appropriate response times, and attitudes regarding treatment:**
  - Developed IRB-approved protocol for all patients having had a REACH Telestroke consult to be surveyed to obtain information related to their recognition and response to the symptoms which led to their REACH stroke consult. *(See **Appendix 17**: Protocol).* USAMRMC ORT final approval is pending.
  - Developed and tested initial patient survey for submission with study protocol *(see **Appendices 41**: Patient Survey Letter of Introduction and **42**: Patient Survey-excerpt only)*
  - Collected patient contact data from REACH database and prepared it for survey mailing list. Mailing is pending USAMRMC ORT approval
  - Entered survey into RedCap survey system in preparation for data entry
  - Sent letters introducing program to all S.C. and REACH partner hospital CEOs
- **Time from Onset of Symptoms to Emergency Department**
  - Requested EMS "run sheets" on all REACH patients that used EMS: DHEC data request was developed, reviewed & submitted for two NEMISIS II data sets: one identified for REACH patients and one de-identified for all patients *(see **Appendix 19**: DHEC Data Request).*
    - Data release is pending DHEC approval.
  - Examined critical time point data in REACH as potential evaluative criteria
  - Examined feasibility of conducting a community-based assessment regarding related attitudes/opinions (e.g. 911-use, reasons for time delays, potential interventions).
    - Created the Community Engaged Assessment to Eliminate Stroke (CEASE) Proposal in partnership with the SE VIEW Community Engagement Scholar leadership team and submitted it for SCTR Pilot Project funding *(see **Appendix 22**: CEASE Proposal).*
    - Alternate funding source is currently being sought.
  - Conducted literature search of research related to 911 utilization for acute stroke and community awareness/education programs for stroke (see **Appendix 21**: References)

- **Use of Alteplase (tPA):**
  - Requested two data sets from ORS to assess tPA use and the impact of REACH *(see **Appendix 17**, **Attachment IV**: Protocol - ORS Data Request).* Data matching, required for final data release, cannot be completed without USAMRMC ORT approval of protocol.

Aim III. Provider Education: Developed, implemented and evaluated a Stroke CME program

- **Provided targeted stroke and stroke prevention CME programs to health providers in the ROI:**
  - Developed the initial CME concept and completed the CME application process.
  - Examined potential CME training sites and partnerships and selected first partner.
- **Identified gaps in know ledge, behavior & outc omes and design the CME pr ograms specific to these needs**
  - Conduct initial interview of key personnel at partner site to determine appropriate CME program format; Developed three-session format versus 1-day format, as requested.
  - Collaborated with Area Health Education Center (AHEC) to assess training needs and appropriate use of the South Carolina Health Occupations Outreach Learning System (SCHOOLS) distance learning network.

- **Administered the CME programs through the trad itional, in-person CME venue and utiliz ing distance learning technology**
  - Selected presenters, topics and training dates.
  - Developed/administered program curriculum live.
  - Aired live presentations across the state using the AHEC SCHOOLS Network, thus expand community access to training *(see **Appendix 26**: Stroke CME)*
- **Created a bank of enduring stroke and stroke prev ention education material that can be accessed electronically**
  - Collected all training materials for future use, as appropriate.
  - Recorded all CME broadcasts and offer programs online for CME credit *(see **Appendix 26** for link)*
- **The success of the CME was evaluated by assessing changes in knowledge, behavior and outcomes**
  - Developed assessment materials and evaluated programs online using Survey Monkey *(see **Appendix 26** for evaluation links)*
- **Educate the Next Generation:** Mentoring program *(see **Appendices 27-28** for select student poster presentations).*

Aim IV. SE-VIEW Data Repository (a.k.a. Epidemiology Core): *Developed Epidemiology Profiles & began to acquire/maintain overall data sets as a common resource for all SE VIEW cores.*

- **Completed Aim I: Determine Region(s) of Interest (ROIs)** *(see **Appendix 14**)*
  - Defined Primary ROIs grouped by county into 3 regions*:*
    (1) I-95 Corridor; (2) Coastal Carolina; (3) Rest of S.C.
- **Began to acquire/maintain of databases pertinent to SE VIEW projects, including:**
  - Emergency room and Hospital data
  - Socioeconomic status (SES) and Census data
- **Began to analyze and report data and utilize the three ROI's**
  - Collected, standardized and reported initial disparities data by ROI in the first SE VIEW Epidemiology Profile (see Aim I above).

Aim V. IRB/ORS: *Developed study designs, protocols and data requests for review/approval*

- **IRB Approval:** Initial research protocol designed, developed, submitted & received approval *(see **Appendix 17**: Protocol with attachments)*
- **USAMRMC ORT Approval**:
  - IRB-approved protocol submitted to USAMRMC ORT;
  - All USAMRMC ORT concerns were addressed
  - USAMRMC ORT approval is still pending
- **NOTE:** Next year, this action item will be moved under the new Aim I: Administration

Aim VI. Stroke Care - REACH-MUS C Telemedicine P rogram: *Improve access to care through the use of telehealth technologies*

- **Site Expansion:** Expanded geographic access to Stroke Care by adding new REACH sites *(see **Appendix 24**: REACH Network)*
  - Added six new REACH sites: Dillon, Springs, Carolina Pines, Self, Loris, & Seacoast
  - Expanded current REACH MUSC Telemedicine Network to 15 sites representing 2,482 hospital beds and 471,875 annual ED visits. This network provided over 1,250 consultations by the end of FY2011.
- **Program Expansion:** *Collaborate & examine feasibility to expand access to other specialties using*

REACH technologies

- **MUSC CREST (Sepsis & Trauma) Program:**
  - CREST was successfully established using the REACH platform.
  - CREST/REACH staff held regular collaborative meetings
  - First combination CREST/REACH site was established at Williamsburg Regional
- **Other Specialties:**
  - Examined feasibility of using REACH technologies for several other specialties interested in telemedicine including Cancer and Alzheimer's, neither of which are good candidates for using REACH.
  - Provided consultative services and support for other specialties exploring telemedicine, including Dr Axon's Tele Nursing Home proposal.
- **Primary Care setting:** Began to develop a model for expansion into primary care

- **Patient Care/Follow-up:**
  - **Physician Portal:** *Allow referring physicians to access their patients' EMR at MUSC in order to improve communications and continuity of care.*
    - Collaborated with the MUSC Physician Liaison Program to introduce the E-Care Net Viewer/Oacis program to our REACH partner sites.
    - Portal introduced to all new REACH sites as a presentation during the initial MUSC CME Training Program and applications distributed, upon requested.
    - Provided contacts at existing REACH sites to Liaison for further dissemination.
  - **Tell the Story:** *Document qualitative patient care information*
    - Developed an audio-video presentation of patient stories, posted them online and presented them during program presentations, as appropriate.
    - Working with marketing as we continue to collect/disseminate patients' stories.

Aim VII: SSRI Program Administration: *Maintain a strong, multidisciplinary team able to support program aims in a collaborative manner.*

- **Team Building and Program Coordination**
  - The SSRI Team was developed, a weekly meeting schedule was established, and an agenda format with work-scope/actions was created for review each week.
  - Expanded team as appropriate based on partner interface/collaboration.
  - SSRI representatives attended all SE VIEW Executive meetings, Strategic Planning retreats and other function, reporting back to the team.
  - All reporting requirements were met.

- **Interfaced and collaborated with potential partners on an ongoing basis and as appropriate**
  - Interfaces/collaborations of note included:
    - MUSC Hollings Cancer Center (HCC) - Cancer Disparities Program (CDP)
    - MUSC Community Engagement core & Community Engaged Scholars
    - S.C. Statewide AHEC program
    - Youth Stroke Program (Coastal Carolina University – Amy Edmonds
    - USC Stroke Program (Dr Souvik Sen)
    - MUSC Hypertension Initiative (Sheryl Mack)
  - Invited potential collaborators to SSRI Team meetings. Several of these interfaces led to further partnerships and/or led to the addition of a SSRI Team member.

- **Conducted site analyses of potential external partners**
  - Determined ROIs, identified potential partners, examined Epidemiology Profiles, and contacted potential partners, as appropriate, including:

        - Clarendon Hospital: Williamsburg County - Manning, SC (I-95 Corridor)
        - Toumey Regional: Sumter County - Sumter, SC (I-95 Corridor)
        - Colleton Medical Center: Colleton County - Walterboro, SC (I-95 Corridor)
        - Bamberg County Hospital: Bamberg County – Bamberg, SC (I-95 Corridor)
    - Based on analyses, engaged existing partners in SSRI initiatives as appropriate:
        - Williamsburg – CREST/REACH program expansion and training
        - Georgetown – CEASE pilot community
- **Promoted the aims of SE VIEW and SSRI whenever appropriate**
    - Attended numerous meetings/conferences and created a wide variety of promotional materials as outlined in **Appendix 15** - Promotional Activities Update; a fairly comprehensive listing of efforts contributed by key SSRI Team members.
    - Provided a number of program presentations, as well as presentations of preliminary findings as seen in the following appendices:
        - **Appendix 12**: SSRI Overview Presentation
        - **Appendix 20**: REACH Overview Presentation
        - **Appendix 18**: Access Poster Presentation
        - **Appendix 27**: High BP Disparities Poster Presentation
        - **Appendix 28**: ASPECTS Poster
- **NOTE:** Next year "Program Administration" will be listed as Aim I as "Defining the ROI" is complete.

Heart Health – Preventive Cardiology Research Center

- Heart Health's Preventive Cardiology Research Center was developed to promote pediatric cardiovascular health disparities training.
- Heart Health's overall program expansion exceeded goal of 10-15%, reaching 36% for year.
- Program operations averaged 109% of projected maximum capacity for year.
- Activity increased significantly in all program components (new, return, group, and fitness).
- The MUSC Center for Promotion of Healthy Lifestyles in Children and Families was developed in January 2011.
- Heart Health was presented to the Children's Hospital Board in April 2011.
- Heart Health sponsored the nutrition and fitness component of Sullivan's Island Elementary School's Wellness Fair in May 2011.
- South Carolina's Obesity Awareness Month was established by the governor in June 2011.

SC TeleSupport: Diabetes Management Initiative (Effectiveness of Technology-Assisted Cas e Management in Low Income Adults with Type 2 Diabetes

- During the first quarter, we hired staff and conducted negotiations for purchasing equipment and supplies needed to conduct the study. We also initiated collaborations with the federally qualified health centers (FQHC's) to build relationships and establish rapport with the clinic management and staff.

- During the second quarter, we continued the process of hiring staff and conducting negotiations for purchasing equipment and supplies needed to conduct the study. We also continued to conduct collaborations with the federally qualified health centers (FQHC's) to build relationships and establish rapport with the clinic management and staff. We met with the staff physicians at the health centers and used their feedback to generate a proposal conducive to the needs of the patients they service. Based on the results of participatory research meetings with the center staff, we established algorithms for the titration of blood sugar and blood pressure medications prescribed to the patients. The nurse case manager will utilize these algorithms during the course of the study.

- During the third quarter, we hired staff and continued negotiations for purchasing equipment and supplies needed to conduct the study. The staff members were given instructions and trained on use of the device. We are currently piloting the device to assess its usability and function, in order to anticipate and reduce foreseeable issues that may arise when given to the participants. The staff members also attended diabetes educational sessions for information about diabetes and hypertension, medication management, self-care techniques, symptoms, and possible outcomes. We continued to conduct collaborations with the leadership at the federally qualified health clinics (FQHC's), to build relationships and establish rapport with the clinic management and staff. Based on our progress with the FQHC leadership, we submitted a proposal and all pertinent materials to the MUSC IRB and received approval contingent upon establishing an IRB Authorization Agreement between Franklin C. Fetter and MUSC. On April 20, 2011, all final and approved documents were submitted to Mr. Jeffrey Stephens for submission to the ORP HRPO for approval. After receiving both approvals, will be ready to proceed with recruitment.
- During the fourth quarter, we received approval from the MUSC IRB #2. We are still awaiting approval from USAMRMC ORT. After receiving secondary approval, we will request a list of individuals who may be eligible for participation in the study. Our goal is to recruit 50 participants (for the first quarter) that will be randomized to either usual care or the intervention group. These individuals will be recruited from FQHC's within the local Charleston community. We will continue to train the staff on use of the FORA equipment and conduct educational sessions on diabetes and hypertension. We will continue to discuss medication titration guidelines with the nurse case manager.
- REDCap Database initiated – a server for data collection and storage

Tele-Critical Care to Reduce Rural Health Disparities

- **Synergy between SE VIEW and CREST**
  The SE VIEW Tele-Critical Care program is leveraging the research and program development accomplishments of the Critical Care Excellence in Sepsis and Trauma (CREST) research project. CREST is an NIH funded grant that has developed an outreach program between MUSC and four rural hospitals. Specifically, CREST provides an educational program to clinicians in rural hospitals on sepsis and provides clinical consultations through tele-medicine between MUSC specialists and emergency department clinicians at partner hospitals. Other accomplishments from CREST that support SE VIEW's objectives include:
  - Development of a scientific and administrative team with previous tele-medicine research experience thereby establishing synergy with CREST and other tele-medicine programs at MUSC. Specific individuals partnering in both CREST and SE VIEW include:
    - Kit Simpson, PhD, Co-Investigator, health services research, biostatistician, health economist
    - Jane Zapka, ScD, Co-Investigator, behavioral scientist, program evaluation expert
    - Kate Taylor, MS, Program Associate
    - Laura Langston, Program Coordinator
  - Developed a preventive medicine, health and wellness online enduring clinical education program in the treatment of critical illness with CME/CE credit awarded via MUSC and Area Health Education Consortium (AHEC)
  - Led educational programs in the treatment of sepsis at rural, medically underserved hospitals
  - Conducted exploratory recruitment meetings with program presentations at seven rural, medically underserved hospitals in SC: Bamberg County Hospital, Barnwell County Hospital, Williamsburg Regional Medical Center, Regional Medical Center of Orangeburg, Newberry County Hospital, Hilton Head Hospital and Coastal Carolina Hospital

- Enrolled four rural, SC hospitals and completed all necessary administrative and regulatory requirements for the inter-institutional clinical and research collaborations (e.g. physician credentialing, FWA certification for partner sites, and memorandum of agreements): Bamberg County Hospital, Barnwell County Hospital, Williamsburg Regional Medical Center and Regional Medical Center of Orangeburg

- **Independent SE VIEW Tele-Critical Care accomplishments**

  SE VIEW expands upon the CREST program by including a broader population of critically ill patients and a more diverse array of interventions. SE VIEW tele-critical care has conducted preliminary analysis during year one to ascertain which patient populations might most benefit from targeted interventions. Initial preliminary analysis focused on a possible interface between poorly managed chronic medical conditions, end-stage renal disease, hemodialysis, bloodstream infections, and sepsis. Surprisingly, while underserved, minority populations do have higher rates of end-stage renal disease and bloodstream infections, they do not have higher rates of sepsis. Thus, SE VIEW tele-critical care is expanding its scope and conducting a population based, descriptive investigation of critically ill patients in SC with sepsis and respiratory failure. Race-associated disparities in sepsis severity and mortality[36,37] have been described but the mechanism for these disparities is unknown. One hypothesis that SE VIEW will explore is whether the race-associated disparities are due to patient factors, community factors, or hospital factors. It is presently unknown whether there are race-associated disparities with respect to outcomes from respiratory failure and SE VIEW will investigate this important question. Ultimately, SE VIEW's objective is to identify opportunities to improve care at the patient, community and hospital levels targeting hospital-level interventions first. Other accomplishments of SE VIEW tele-critical care for year one include:

  - Enhanced collaboration and partnerships with other MUSC tele-medicine programs (Stroke, Alzheimer's, pediatric asthma) through recurring meetings, sharing research products/ideas (e.g. surveys, data collection forms, lessons learned)
  - Designed a conceptual model for investigating the inter-hospital transfer patterns and care transitions for critically ill patients (see **Fig. 8** in Body)
  - Outlined a research strategy to develop and test interventions expanding on CREST's interventions to improve outcomes for patients with sepsis and respiratory failure with a specific focus on medically underserved communities
  - Submitted for review the phase one SE VIEW Tele-Critical Care Protocol to MUSC Institutional Review Board
  - Submitted and received preliminary approval (pending IRB approval) from the SC Office of Research Statistics Data Oversight Approval Committee. This was necessary to obtain hospital-identified data for all SC patients in 2010 with a diagnosis of sepsis and respiratory failure.

- **Interface between SE VIEW Tele-Critical Care and related SE VIEW programs**

  SE VIEW tele-critical care benefits from a tele-medicine research team with experience identifying and recruiting hospitals into outreach research projects. Personnel have learned the administrative tasks required for an inter-institutional study and most important, the critical, lengthy, and delicate task required to engage a rural community hospital into a tele-medicine network – developing a trusting, mutually respectable association. The co-investigators on SE VIEW offer broad backgrounds in methods related to program evaluation, quality improvement, and clinical and community research. Further, the SE VIEW project has enhanced the current MUSC tele-medicine collaborations. Multi-disciplinary collaborative meetings with study staff of the Stroke Risk Reduction Initiative and Tele-medicine in the Evaluation of Alzheimer's Disease allowed all projects to more effectively strive towards the goal of significantly reducing health care disparities. Valuable insights were gained on the challenges of developing a successful tele-medicine program while working as a team showed solidarity between the programs.

Lean Team Initiative

There are no research accomplishments to report at this time. Approval is pending and data collection is not expected to occur until the 2011-2012 school year. We have already submitted a request to carry over funds into Year 2 for data collection.

Community Engaged Scholars Initiative (CES)

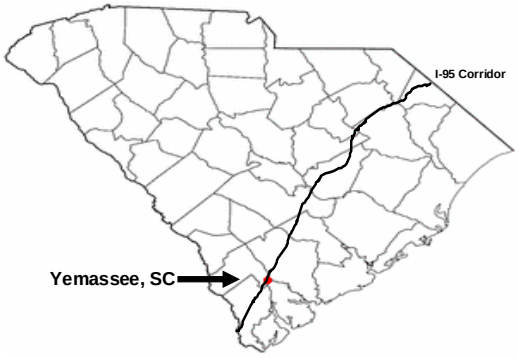
- Enrolled (5) academic-community teams into second cohort of CES program in August 2010
- Completed all scheduled training and education sessions for CES program
- Facilitated pilot project work for all five (5) CES teams
- Conducted 6 presentations at international conference with CES program staff and three CES teams from Cohort 1
- CES program model dissemination at two (2) additional national conferences

Mobile Outreach Van, Educational and Navigatio n Health Services for Underserved Populations (MOVENUP)

- **Task 1. Provide Mobile Health Unit (MHU) services and patient navigation services**
  We formed a Yemassee Health Initiative Coalition in Yemassee, South Carolina (SC) which is located in both Beaufort and Hampton counties of the SC's I-95 Corridor. The Coalition members:

Names	Position/Titles
J.L. Goodwin -	Yemassee Mayor
Ethel B. Denmark -	Hampton County Healthcare Consortium (Health Services)
Valerie Muelnman -	Beaufort-Jasper-Hampton Comprehensive Health Care Center
James W. Etheredge -	MUSC Health Hollings Cancer Center (Cancer Disparities)
Sory Reyes -	Beaufort-Jasper-Hampton Comprehensive Health Care Center
Tammy B. Washington -	SC DHEC Region 8 (Hampton Co. Health Department)
Josie F-Anderson -	Mid Towne Café (Local Business Owner)

Figure 16. Location of Yemassee, SC



We planned a MOVENUP event in conjunction with community health activities already scheduled in the community.

In collaboration with the newly formed Coalition, we developed the Yemassee Health Days Project, which took place on December 3-4, 2010 at Yemassee Town Hall. **(Appendix 43**) The MOVENUP team provided mobile cancer breast screening services on December 3, 2010 and prostate cancer screening services on December 4, 2010. The demographic characteristics of the Yemassee Cancer Screenings are shown in **Table 10.** The MOVENUP team provided patient navigation services for those screened who require additional diagnostic testing.

Table 10. Demographic Characteristics of Yemassee Cancer Screening Participants			
Mammography Screenings (N=13)		**Prostate Screenings (N=8)**	
VARIABLE	**N (%)**	**VARIABLE**	**N (%)**
Age		**Age**	
Less than 39 years	1 (0.08)	Less than 39 years	0 (0.0)
40-49 years	2 (0.15)	40-49 years	4 (0.50)
More than 50 years	10 (0.77)	More than 50 years	4 (0.50)
Race		**Race**	
African American or Black	7 (0.54)	African American or Black	8 (100.0)
Caucasian or White	(0.46)	Caucasian or White	0 (0.0)
Other	0 (0.0)	Other	0 (0.0)

In collaboration with the Free Medical Clinic of Darlington County, Carolina Pines Regional Medical Center, McLeod Medical Center Darlington and Care South Carolina, we developed plans to provide breast and prostate screening and navigation services on the Medical University of South Carolina

Hollings Cancer Center Mobile Health Unit (MHU) to residents of Darlington County. The screenings took place in strategic locations of Darlington County.

Figure 17. Location of Darlington, SC

On September 1, 2010, the MOVENUP Team visited Darlington, SC to prepare for the screening that took place at three different sites in the county October 11-15, 2010. The sites were: Darlington, Society Hill, Hartsville and Lamar. The MOVENUP Team provided mobile breast and prostate cancer screening to residents of Darlington County and provided patient navigation services to participants whose screening results require additional diagnostic testing **(Tables 11 and 12).** The demographic characteristics of Darlington County cancer screening participants are shown in **Table 13.**

Table 11. Darlington County, Breast and Prostate Cancer Screening Sites		
City	**Screening Type**	**Screening Site/Location**
Darlington	Breast cancer screening via mammography	Free Medical Clinic of Darlington County
Society Hill	Breast cancer screening via mammography	CareSouth Carolina
Hartsville	Breast cancer screening via mammography	Free Medical Clinic of Darlington County
Hartsville	Prostate cancer screening via digital rectal exam and prostate specific antigen test	CareSouth Carolina
Lamar	Prostate cancer screening via digital rectal exam and prostate specific antigen test	Piggly Wiggly

Table 12. Dates of Breast and Prostate Cancer Screening in Darlington County

Date	Location	Screening Type
October 11, 2010	Free Medical Clinic of Darlington County 203 Grove Street, Darlington, SC	Breast cancer screening via mammography
October 12, 2010	CareSouth Carolina 268 Main Street, Society Hill, SC	Breast cancer screening via mammography
October 13, 2010	Free Medical Clinic of Darlington County 500 West Carolina Avenue, Hartsville, SC	Breast cancer screening via mammography
October 14, 2010	CareSouth Carolina 201 South Fifth Street, Hartsville, SC	Prostate cancer screening via digital rectal exam and prostate specific antigen test
October 15, 2010	Piggly Wiggly Food Store Parking Lot 100 North Railroad Avenue, Lamar, SC	Prostate cancer screening via digital rectal exam and prostate specific antigen test

Table 13. Demographic Characteristics of Darlington County Cancer Screening Participants

Breast Cancer Screenings (N=48)		**Prostate Cancer Screenings (N=26)**	
VARIABLE	**N (%)**	**VARIABLE**	**N (%)**
Age		**Age**	
Less than 39 years	3 (0.06)	Less than 39 years	0 (0.0)
40-49 years	19 (0.40)	40-49 years	19 (0.73)
More than 50 years	26 (0.54)	More than 50 years	7 (0.27)
Race		**Race**	
African American or Black	32 (0.67)	African American or Black	21 (0.81)
Caucasian or White	14 (0.29)	Caucasian or White	5 (0.19)
Other	2 (0.04)	Other	0 (0.0)

We are currently working on plans to provide mobile breast and prostate cancer screening and navigation services to residents of Darlington County in the fall of 2011. Our team is working in collaboration with the Free Medical Clinic of Darlington County, Carolina Pines Regional Medical Center, McLeod Medical Center Darlington and Care South Carolina.

- **Task 2. Provide cancer education awareness and education related to nutri tion/physical activity to the identified I-954 Corridor counties**

On October 30, 2010, 31 community residents attended a 4-hour cancer education training program in Yemassee, SC. Participants were recruited via our community partners. A Train-the-Trainer approach was used, in which each intervention participant signed a contract agreeing to conduct two (2) training sessions in their own communities in the coming year.

The information disseminated during the training program (i.e., "the intervention") consisted of a 4-hour evidence-based cancer education program in which a 3-hour component focused on general cancer information, a 30-minute component highlighted prostate cancer information, and a 30-minute component focused on cancer clinical trials information. The cancer knowledge component of the intervention was developed by the SC Cancer Alliance (SCCA) for general audiences with no expert

knowledge about cancer. The prostate cancer knowledge component was developed by the American Cancer Society for lay audiences.

The cancer clinical trials information component was based on a 30-minute PowerPoint presentation that is available on the National Institutes of Health (NIH)/National Cancer Institute (NCI) website. The NIH/NCI clinical trials presentation was modified to include additional pictures of African Americans and cancer mortality data that are specific to African Americans in South Carolina. Another modification was the addition of information about the Tuskegee Syphilis Study. The intervention includes a description of which elements of the Tuskegee Syphilis Study violated human rights (e.g., not informing participants that they were in a research study; not sharing information about the modes of transmission of syphilis with infected study members; not allowing infected study members to have access to penicillin when it was discovered in the 1950s as a treatment for syphilis; not allowing the study participants to withdraw from the study at their discretion, etc.) and a description of the human subjects protections that are currently in place as a result of the Tuskegee Syphilis Study. The intervention also includes graphic images to illustrate the processes of random selection and randomization. It was designed to present complex information in an understandable manner using simple, lay language that has meaning for the participants.
The sociodemographic characteristics of the participants in the October 30, 2010 cancer education and cancer clinical trials education training program in Yemassee, SC are described in **Table 14.**

Table 14. Cancer Education Guide (CEG) Training Seminar
Yemassee, South Carolina
Saturday, October 30, 2010

Participant Sociodemographic Characteristics (N=30)

Variable	N	(%)
Age[a]		
18-29	0	(0.0)
30-39	5	(0.18)
40-49	12	(0.43)
50-59	6	(0.21)
60-69	3	(0.11)
70-79	2	(0.07)
Race[a]		
African American or Black	25	(0.86)
Caucasian or White	4	(0.14)
Native American	0	(0.0)
Asian	0	(0.0)
Other	0	(0.0)
Education[a]		
Elementary	0	(0.0)
Junior High	0	(0.0)
High School	7	(0.24)
Some college	9	(0.31)
College Graduate	5	(0.17)
Post College	8	(0.27)
Gender[a]		
Male	0	(0.0%)
Female	30	(100.0%)

[a]Missing data on these variables

On February 11, 2011, we conducted a community based cancer education and awareness program focusing on the role of nutrition and physical activity in cancer prevention, improved cancer treatment outcomes, and prevention of cancer recurrence. The program was offered at no charge and included a cornucopia of healthy, vibrantly colored food for the participants. Almost 300 primarily African American participants from Charleston and the surrounding region participated in the program (n=289). **Appendix 44** includes a flyer describing the event.

The program developed out of a partnership between the MUSC Hollings Cancer Center (HCC) and local civic, faith-based and fraternal organizations. The program planning process began in August 2010 by (1) identifying tasks required to conduct the program and (2) developing a time line for completing each task (**Appendix 45).**

Activities were conducted to lay the foundation for the cancer education program:

- Identified potential community partners though referrals from our existing community partners such as our HCC Cancer Disparities Advisory Board members and secured commitment from the identified community partners to work together to support the program.
- Asked the community partners to support the event through their membership bases and their community networks.
- Selected a centrally located venue in the City of Charleston that had ample parking and seating capacity as well as a long-standing reputation as a trusted meeting location for events in the African American community (the International Longshoreman's Association, which donated the use of the venue and became a sponsoring partner).

The first planning meeting took place on Thursday September 28, 2010 at the HCC. The initial focus of the program was on prostate and breast cancer and we initially designed separate planning meetings for male and female community partners. However, they informed us that they wanted to focus on the role of nutrition and physical activity, which transcended each type of cancer and gave the program a broader focus. Members of the following organizations participated in the planning meetings:

Female-Focused Organizations

- Gamma Xi Onega Chapter –Alpha Kappa Alpha (AKA**)**
- Jack & Jill of America, Inc.
- North Charleston Delta Sigma Theta
- Nehemiah Chapter #388 Order of Eastern Stars
- Tri-County Black Nurses Association

Male-Focused Organizations

- US TOO Prostate Cancer Program
- Men's Group of the Church of Christ at Azalea Drive
- WE Venture, LLC for Men Only Symposium
- Arabian Temple #139
- Kappa Alpha Psi Fraternity, Inc.
- Brotherhood - Mt. Moriah Baptist Church

Other organizations included the Charleston County Black Lawyers Association, the Charleston County Stroke Action Committee, and the South Carolina African American Tobacco Control Network.

During a follow-up planning meeting on September 28, 2010, representatives of the organizations described above stated that the program should emphasize the importance of beginning/maintaining a nutritionally balanced diet and engaging in physical activities. This focus is largely due to the fact that South Carolina has the nation's ninth highest rate of obesity. Three out of every five South Carolina adults are either overweight or obese. Obesity is related not only to cancer but also to other diseases that

are highly prevalent in South Carolina, such as heart disease, stroke, and diabetes. Collectively, these diseases have a significant and negative impact on health outcomes and quality of life of community members. Because of the negative impact of smoking on these diseases, the planning committee recommended that the program also emphasize the importance of maintaining smoke-free environments on improving health outcomes. By October 20, 2010, a total of 26 organizations signed commitments to join the coalition of community partners in support of the program:

- 100 Black Men of Charleston
- Alpha Kappa Psi Fraternity, Inc.
- Alpha Phi Alpha Fraternity, Inc.
- American Cancer Society
- Arabian Temple #139
- Charleston County Stroke Action
- Chi Eta Phi Nursing Sorority
- Church of Christ at Azalea Drive
- Gamma Xi Omega Chapter – Alpha Kappa Alpha
- Girls Scouts of America
- Jack & Jill of America, Inc.
- Kappa Alpha Psi Fraternity, Inc.
- Low Country Chapter Oncology Nurses Association
- MUSC College of Nursing
- MUSC SE VIEW (PI: Dr. Sabra Slaughter)
- Nehemiah Chapter #388 Order of Eastern Stars
- North Charleston Delta Sigma Theta, Inc.
- Sea Island Comprehensive Health Cooperation
- Sigma Pi Phi Fraternity, Inc.
- South Carolina Cancer Alliance
- St. James-Santee Family Health Center
- Thurgood Marshall Legal Society (Charleston County Black Lawyers Association)
- Tri-County Black Nurses Association
- Upward Bound
- US TOO Prostate Cancer Program
- WE Venture, LLC for Men Only Symposium

During the October meeting, the following program theme was selected: ***Research and Recipes: Working Together, Reaching Solutions***. During the meeting, the agenda for the program was developed and speakers were identified.

Dr. Marvella E. Ford participated in a television interview on January 3, 2011 with local television anchor Ms. Carolyn Murray on the importance of African American participation in clinical trials. At the conclusion of the interview, Dr. Ford described the upcoming program. Ms. Murray, an African American woman, is a leading local health advocate, athlete, and staunch supporter of efforts to promote improved nutrition and physical activities in African American communities. Upon learning of the program, she immediately stated that she would like her television station (WCBD TV News Channel 2) to sponsor the televised ads promoting the event. She also stated that the station would conduct live broadcasts during the evening as the event was being conducted. The program included the following speakers:

- **Ms. Carolyn Murray** –Mistress of Ceremonies, Anchor, WCBD TV News Channel 2 Charleston

- **Andrew S. Kraft, MD** – Director, Hollings Cancer Center, gave the opening remarks and welcome.
- **Mr. Angress (Andy) Walker** – Captain US Air Force (Ret.), member of the Board of Director, Roper Saint Francis Health Care spoke as a community stakeholder spoke on the importance and value of community partnerships.
- **Marvella E. Ford**, **PhD** – Associate Professor and Associate Director of Cancer Disparities at HCC described the HCC's community partnerships and continued efforts to enhance its outreach program. She discussed the impact of obesity on cancer, diabetes, heart disease, and stroke in South Carolina and described the importance of community partnership to fight obesity by developing initiatives to promote good nutrition and physical activity.
- **Sandra Millon Underwood, RN, PhD, FAAN** – Professor at the University Of Wisconsin Milwaukee College of Nursing was the keynote speaker. She is a national board member for the American Cancer Society and also an active member of the National Black Nurses Association. She described her funded research projects focused on reducing cancer related health disparities among at risk, disadvantaged, vulnerable, and underserved populations.
- **Michael Wargovich**, **PhD** – Director, HCC Cancer Chemoprevention Program discussed his research studies on the role of locally grown produce in preventing cancer. He used lay language to describe the biologic impact of chemo preventive agents in these foods in reducing carcinogenesis.
- **Reverend Joseph Darby** – a fourth generation minister in the African Methodist Episcopal Church with thirty years of pastoral experience and currently Senior Pastor of Morris Brown AME Church shared information regarding his battle with cancer and the impact of his religious faith on his physical and mental health.
- **Reverend Jeannette F. Jordan** , **RD, CDE** – a registered dietician and certified diabetes educator gave an informative and entertaining presentation on healthy food choices and portion control.
- **Ms. Debbie Bryant, RN, DNP** – Assistant Director of Cancer Prevention, Control and Outreach, HCC gave closing remarks.

- **Task 3. Develop a cancer research training program with students from the following Historically Black Colleges and Universities (HBCU): Claflin University, South Carolina State University and Voorhees College**

  Two students were recruited from Voorhees College, Denmark, SC to participate in the MUSC Summer Undergraduate Research Program (SURP), which offers outstanding undergraduate students the opportunity to work closely with faculty members on cutting edge biomedical research projects:
  - **Ms. Janielle Samuel** was a senior, Biology Major with aspirations of going to a dual graduate degree program for pharmacy and research and obtaining a PharmD/PhD Degree. Ms. Samuel conducted research at the MUSC Hollings Cancer Center in Dr. Danyelle Townsend's laboratory. Her research involved testing protein glutathionylation levels In MCF7 breast cancer cells expressing glutathione S-transferase Pi Isoforms.
  - **Mr. Edward McMorris** was a senior, Biology Major with aspirations of applying to dental school to obtain a DMD degree and conduct oral cancer research. Mr. McMorris conducted research in the MUSC Department of Microbiology and Immunology with Dr. James S. Norris. His research focused on acid ceramidase over expression and its role in the activation of and addiction to Akt signaling in prostate cancer.

  Voorhees College officials have been contacted and invited to identify students to participate in the MUSC Summer Undergraduate Research Program (SURP) in 2011. A brief description of the SURP is as follows:

- This 10-week program expects the undergraduate participants to perform at a graduate student level. Students are placed with faculty members whose research is closely related to academic interests and professional goals of the students. Students work with faculty on an individual basis or as part of a research team. Research teams may also include graduate students, post docs, research scientists and other SURP students.

- During the 10-week program, participants were taught important research skills and techniques. In addition, there is a mandatory seminar series component to the program with tracks in Cardiovascular Biology, Cancer Biology, Neuroscience and Oceans and Human Health. SURP participants are expected to pursue substantive research projects over the course of the program and are required to make a full-time commitment (at least 40 hours per week) to their research as guided by their faculty research mentor.

- Students are required to write a research paper summarizing their projects and are be required to make a presentation to their fellow participants, faculty mentors and others at the end of the program.
- SURP participants are encouraged to build both social and academic networks with one another and with members of the university community. Participants are encouraged to organize and coordinate activities with their peers during off-hours. The Graduate School provides planned activities and events for all SURP participants. Participants may not enroll for classes or hold other employment during the period of the program.

The overarching goal of the Training Program is to recruit the next generation of prostate cancer researchers by exposing undergraduate students ("Student Fellows") from Claflin University (CU), South Carolina State University (SCSU), and Voorhees College (VC) to prostate cancer research at the Medical University of South Carolina (MUSC), and training them to meaningfully participate in such research activities. Basic science and clinical researchers are needed to aggressively pursue and test better methods to decode the prostate cancer fingerprints, which hold the key to understanding the relationship between gene expression and future prognosis. Population science researchers are needed who will identify barriers and facilitators of prostate cancer early detection and treatment, and develop strategies to overcome them. The Training Program will provide a pipeline for future generations of these prostate cancer researchers.

We are in the process of identifying students to participate in the Training Program during the summer of 2011. We are developing the curriculum. It will look similar to the curriculum that we implemented in the summer of 2010, as shown in **Appendices 46-47.**

Health Empowerment Zone

- Formation of community coalition, Healthy North Charleston
- Completion of CDC Community Action Plan
- Dissemination of 4 mini-grants to community organizations
- Development of a template for neighborhood transportation guides
- 24 Community based events providing health education about healthy eating and active living and screening for chronic disease including risk assessments and BMI

Healthy People in Healthy Communities

During the first year of the SE VIEW project, the Healthy People in Healthy Communities program established meaningful county-wide relationships with all of the key stakeholders. As evident from the report, several of those relationships are poised for high-impact growth. We will continue to nurture and build upon those

relationships in Year 02 as we begin to implement the activities that will lead to changes in health behaviors, risk factor control, and health outcomes.

As evident from reportable outcomes noted below, our group has a range of complementary activities that are coincident with and complementary of our SE VIEW program efforts. We anticipate that our programs, which have contributed to the large reduction of cardiovascular mortality in South Carolina, which has improved from 51st to 36th in cardiovascular mortality between 1995 and 2008, will be expanded and accelerated in Williamsburg County. We are both optimistic and confident that the progress in health promotion and disease prevention across the lifespan in Williamsburg County will provide the leading edge for progress in South Carolina and beyond.

Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population

- A program coordinator has been identified to oversee the research project. Responsibilities include overseeing MUSC IRB and Telemedicine and Advanced Technology Research Center regulatory issues; developing and implementing participant recruitment and marketing efforts for all sites; establishing data flow schemes and construction of data forms in both electronic and hard copy; implementing a state-wide system of subject ID numbers that meet HIPPA privacy standards, establish a mechanism to track data edits and provide the longitudinal follow up data storage/retrieval consistent with the protocols of the NACC; and acting as the point of contact for all sites.
- The first partner site has been identified as Andrews Medical Center in Andrews, SC. The physician partnering on this project will be Dr. B. Lee Jones.
- Federal Wide Assurance has been obtained for Andrews Medical Center to validate assurance of compliance with federal regulations for the protection of human subjects in research.
- Training certification has been completed for Andrews Medical Center research staff.
- Credentialing for Dr. Jacobo Mintzer and Beth Safrit has been completed to allow for participation in research at Andrews Medical Center and was effective April 28, 2011.
- Contract draft between MUSC and Andrews Medical Center has been created and under review through the MUSC general counsel.
- Protocol, informed consent, and HIPAA documents have been created.
- Protocol has been restructured and project team has defined specific roles and responsibilities for MUSC research team and Partner Site team members.
- Regulatory materials, to include Protocol, informed consent, and HIPAA documents, have been submitted to the Telemedicine and Advanced Technology Research Center for preliminary review.
- The study is under review of the MUSC IRB and will move on to Telemedicine and Advanced Technology Research Center review in June, 2011. Study approval is expected June or July, 2011.
- Project team made a presentation to a potential second partner site Black River Healthcare. The presentation was with the executive team of Black River Healthcare system to include the Chief Executive Officer, Human Resources/Staff Development Director, Medical Director, Operations Director, Clinical Director of Services, Finance Director, and head nursing staff.
- Project team has collaborated with other SE VIEW programs to include the SC TeleSupport Diabetes Management Initiative, Tele-Critical Care Program to Reduce Rural Health Disparities, and Stroke Risk Reduction Initiative. Discussions with these programs included lessons other programs have learned, sharing of resources, and potential collaboration at similar prospective partner sites.
- Project coordinator attended Sea Islands/Gullah Community Mini Retreat through the South Carolina Clinical and Translational Research Institute to discuss project collaboration with other MUSC and state-wide researchers.
- Project coordinator is collaborating with the South Carolina Area Health Education Consortium to utilize resources already in place in rural hospitals and clinics in the targeted population areas for this project.
- Patient evaluation assessments have been created and finalized.

- Satisfaction surveys have been created and finalized. Satisfaction surveys include patient satisfaction, caregiver satisfaction, partner site physician leader satisfaction, and partner site study staff satisfaction.
- The team worked with MUSC's Director of Academic and Research Systems to create the appropriate web based application to upload, share, and store all documents related to the evaluation of patients seen through this telemedicine project. The program to be used is MUSC Filelocker.
- Data collected from the assessments completed by the MUSC research team will be collected and analyzed through the Research Electronic Data Capture (REDCap) Database. REDCap is a secure, web-based application designed exclusively to support data capture for research studies. The RedCap Database specific to this project has been created and is undergoing final proofreading and testing to ensure appropriate access and use at the time patient evaluations begin.
- Marketing materials to include brochure and handout have been created for patient recruitment.
- Marketing materials have been created for physician referral marketing.
- The team has identified the appropriate video conferencing equipment for this project (Tandberg Movi) with the help of MUSC's OCIO. Equipment has been purchased.
- Additional equipment has been selected and purchased in order to carry out this project. Additional equipment includes Apple MacBook laptops.

Reportable Outcomes

- **Southeastern VIEW Administrative Core (SEVAC)**
  - **Examples of progress during the first year include:**
    - Establishment of an experienced management team – in addition to the PI and Finance Director, an experienced, fulltime Program Manager, Tracey W. Smith, was hired and 'hit the ground running'
    - Identification and intensive engagement of key consultants for strategic planning and evaluation
    - Successful implementation of key communication/coordination activities (calendar of meetings and conference calls) and administrative/fiscal activities (establishment and review of accounts, personnel actions, as listed above
    - Establishment of 'SE VIEW Action Agreements' with each SE VIEW Initiative Director
    - Development of template for and submission to USAMRMC ORT of detailed quarterly reports for each initiative
    - Management of the 2010 National Conference on Health Disparities (Philadelphia, Nov. 10-13, 2010); confirmation and initial planning for the 2011 National Conference
    - Launch of the SE VIEW website (http://academicdepartments.musc.edu/seview) [38] with extensive crosslinks to partners, affiliates, resources and tools; launch of SE VIEW Facebook page
    - Approval of SE VIEW Phase II is pending; designed to build on the foundation of community trust and partnership and facilitate full implementation of a robust integrated model of community-based research and community health
    - Development of the SE VIEW Evaluation Plan and Logic Model
    - Progression within the Junior Faculty Development Program

- **MUSC Public Information and Community Outreach (PICO) Initiative and Community Institutes for Traditional and Nontraditional Leaders**

  A total of 463 individuals attended CLIs; 82 attended TAWs; and 650 attended the National Conference on Health Disparities. PICO's programs can be accessed at the following website: http://pico.library.musc.edu. [39]

  The impact of the Our Health Series dialogue reaches far beyond the 60 in attendance at ETV on the day of the production. Co-produced by the Medical University of South Carolina and ETV, the Our Health Series reaches thousands of South Carolinians and their neighbors in bordering areas of North Carolina and Georgia. Distribution methods include:

  1. The programs' original two ETV statewide telecasts, which independent ratings services estimate are viewed in 25,000 households, mostly in South Carolina, but including such bordering cities as Charlotte, NC, and Augusta and Savannah, GA.
  2. The programs' subsequent multiple re-airings on ETV and its affiliates, including the South Carolina Channel. Our Health Series programs enjoy a tremendous "shelf life," i.e., ETV rebroadcasts them on a regular basis.
  3. Free distribution of approximately 200 DVDs to prospective viewers, including requests from colleges, universities, high schools and public libraries.

  Hands on Health-SC staff members (Ms. Nancy McKeehan, Ms. Monique Hill, Mr. Sherman Paggi, and Ms. Maya Hollinshead) have participated in 11 exhibits from September 2010 to June 2011 throughout Charleston, Johns Island, Myrtle Beach, Columbia, Aiken, and Florence SC, which led to lay

community individuals requesting several additional trainings. The exhibits fostered an opportunity for Hands on Health-SC to conduct in-depth website presentations as well as show individuals how to access health resources through interactive Internet interface. The exhibits also gave Hands on Health-SC an opportunity to share their website addresses: www.handsonhealth-sc.org [3] and www.hoh-sc.org. [40] Consequently, Hands on Health-SC has had a total of 398,388 individuals visit their website.

Under Dr. David Rivers' direction, Dr. Glenn Fleming, Mr. Richard Jablonski, Ms. Latecia Abraham and Ms. Claudia Cartledge continue to deliver programs that address health disparities by delivering information and resources to live, television and web audiences. PICO brings programs directly to communities for the purpose of reducing disparities and improving the quality of healthcare and life. Based on the evaluation summary reports (See **Appendices 6-11**), PICO programs are well received. PICO proposes to continue these activities for another year.

- **Health Careers Academy and Junior Faculty Development**
  - Seven (7) PowerPoint presentations were developed, facilitated and made available for public review at www.scahec.net [41]
  - Seven (7) poster presentations were developed
  - Students have been connected with faculty and practicing professionals willing to serve as role models
  - Six (6) students were gifted a Princeton Exam Review of their choice
  - Program participants will be tracked to assess matriculation rates
  - Recommended program modifications
    - Addition of professional exam preparation sessions
    - Increased participation of current health professions students

- **Stroke and Stoke Risk Reduction Initiative (SSRI)**

The SSRI Team succeeded in producing a number of reportable outcomes during this initial grant period, such as manuscripts, abstracts and presentations. Please refer to Appendix 2: Promotional Activities Update for a fairly comprehensive outline of the reportable outcomes emanating from this research, including: Articles and publication, Meetings and conference presentations, CME training/presentations and Research submissions and letter of support. Additionally, several appendices attached to this report provide presentations and posters illustrating research findings and outcomes. These include:

- **Appendix 12**: Stroke and Stroke Risk Reduction Initiative Overview Presentation, RJ Adams, Community Leaders Institute, Florence, SC, May 2011.
- **Appendix 20:** REACH MUSC Overview Presentation, E. Debenham, Young Stroke Expo, Litchfield Beach, SC, May 2011. Modified versions of this presentation were also presented as follows:
- Debenham, MUSC Stroke Symposium, Charleston, SC, Apr 2011.
- E. Debenham, S.C. Rural Health Meeting, Myrtle Beach, SC, Apr 2011.
- R. Adams, Meeting of the Minds, SUNY, Syracuse, NY, Sep 2010.
- **Appendix 23**: REACH MUSC Poster; D. Lackland, Stroke Belt Consortium, March 2011 and O'Quinn Symposium, Columbia, SC, Apr 2011
- **Appendix 13**: SE VIEW Epidemiology Profile Presentation, A. Boan, SE VIEW Executive Meeting, Charleston, SC, Nov 2010.
- **Appendix 18**: Access to Urgent Stroke Treatment Poster, A. Kazley, Academic Health Conference, Seattle, WA, June 2011.
- **Appendix 27**: High Blood Pressure Treatment among Black and White Stroke Patients Poster, A. Boan, American Society of Hypertension Annual Meeting, New York, NY, May 2011.
- **Appendix 28**: ASPECTS Feasibility Study Poster, J. Magarik, American Society of Hypertension Annual Scientific Meeting, New York, NY, May 2011.

Of special note are the mentored posters seen in **Appendices 27-28**, which were accepted for national publication, as indicated in the citations below:

- **Boan, AD,** Bachman DL, Adams RJ, Egan BM, Nicholas JS, Lawson AB, Lackland DT. High Blood Pressure Treatment among Black and White Stroke Patients. *Journal of Clinical Hypertension.* Vol 13, Suppl I April 2011.
- **Magarik, JA**, Adams, RJ Chaudry, MI, Matheus, G, Rumboldt, Z, Turk, AS, Chimowitz , M, Jauch, EC, Holmstedt, C, Boan, AD, Lackland DT. The Alberta Stroke Program Early CT Score (ASPECTS) Demonstrates Good Reliability When Applied to Non-contrast CT and CT-perfusion Parametric Maps. *Journal of Clinical Hypertension.* Vol 13, Suppl I April 2011.

The team also applied for funding based on work supported by this award, as outlined earlier when discussing the CEASE pilot proposal (**Appendix 22**). While the initial proposal submitted for SCTR Pilot Project funding was not accepted and remains unfunded, efforts are currently underway to refine the proposal and seek alternate sources for funding during FY2012.

Substantial progress has been made during this intial grant year. An administrative framework supported by a stellar team with a strong epidemiology core has been established to support the vision of becoming a nationally-recognized stroke and stroke risk research program focusing on health equity and wellness. Initial findings have been analysed which confirm the importance of focusing these efforts on communities within two regions of interest: the I-95 Corridor and Coastal Carolina regions. A sound research protocol has been designed to advance these aims and seems likely to receive final approved early in the coming year.

While awaiting final protocol approval, strides have been made in assessing the REACH Telemedicine Network. Early findings have shown telemedicine's positive impact on access to care and increased use of tPA among REACH hospitals. Preliminary analyses have also offered benchmarks needed to highlight critical time points in acute stroke treatment and have led to development of a proposal for a community engaged assessment towards the elimaination of stroke (CEASE).

A strong methodology for delivering targeted stroke and stroke prevention training to health professional was developed and an initial series of four Stroke CME programs was delivered. Through use of new tele-training technologies, these CME-accredited programs presented by nationally known experts are now available as enduring materials to any health providers with internet access, including military personnel.

The REACH MUSC Telemedicine Network has grown, not only increasing geographic access to expert stroke care but offering access to expert care in other specialties such as sepsis and trauma. However during this process of growth and expansion, the needs of community providers and patients have not been ignored. To improve continuity of care and provider relations, the ECareNet physician portal was introduced; allowing partner sites and community providers electronic access to MUSC medical record for referred patients. Additionally, patients were offered a venue to allow their stories to be heard. In the "Telling the Story of Stroke" video series real patients offer heartfelt insights into the challenges and acheivements experienced when they were struck with this often catastrophic condition.

Some may say "So What?" Though the SSRI program is still in its infancy, these early findings and the resulting materials are already being released in several reportable venues as well as offered as insights during many professional training programs. The expertise of the team and its collaborators has grown and this knowledge is being imparted to a wide array of audiences throughout the state and the nation. Even without the protocol approval necessary to advance the SSRI research plan previously described, early findings continue to valid the importance of using telehealth solutions, such as REACH and

SCHOOLS, to address many obvious health disparities issues, such as access to care and inequities in provider education .

Yet while substantial progress has been made during this first year to address the SSRI aims, research efforts have been greatly hindered by the prolonged wait for USAMRMC ORT approval of the protocol. A rapid response to this request is necessary if SSRI is to honor its commitment to SE VIEW and this program in a timely manner.

- **Heart Health – Preventive Cardiology Research Center**
  - Preventive Cardiology Visiting Professorship 2010 - John Deanfield, MD
  - NIH Minority Summer Research Fellowship 2011 - Jennifer Paige, MUSC medical student
  - Citadel Masters Program Summer Externship 2011 - Katie Evans, middle school health teacher
  - Doctorate in Nursing Practice residency program 2011-2012 - Tiffany Williams, MSN, CPNP
  - Pediatric Cardiology Fellow T32 research project 2011-2014 - Shahryar Chowdhury, MD

Heart Health maintains an overarching focus on identifying and reducing cardiovascular risk factors that contribute to the development of health disparities and impact service eligibility within the young. Primary objectives are to provide a comprehensive range of preventive cardiology and weight management services for the pediatric population of South Carolina, with a particular emphasis upon identifying and addressing etiologic contributors to cardiovascular health disparities. Volunteer involvement and community engagement remain a high priority, as well as maintaining and expanding our existing network of providers and community partners. The program has significantly expanded its operations across all domains and has extended outreach efforts to underserved children and adolescents through partnerships with other SE VIEW initiatives and The Citadel.

In the coming years, the Pediatric Metabolic Syndrome Study's phase two will be developed and submitted for approval in order to provide critical information about a broad range of obesity-associated metabolic and physiologic parameters that impact cardiovascular fitness and ultimately influence the development of health disparities. This data will provide critical insight into potential etiologic mechanisms through which subgroups of obese children and adolescents develop the metabolic syndrome and impaired cardiovascular fitness. When the proposed aims of this study are achieved in approximately 4 years, important scientific knowledge regarding the prevalence of the metabolic syndrome among obese children and adolescents, along with critical data about an array of markers and traits of cardiovascular dysfunction, will be made available to the scientific community. This may in turn lead to improvements in our understanding of the etiologic mechanisms of both type 2 diabetes and atherosclerotic cardiovascular disease in metabolically at-risk individuals—knowledge that will guide both clinical and research efforts toward the reduction of cardiovascular health disparities and the improvement of military readiness among our nation's youth.

- **SC TeleSupport: Diabetes Management In itiative (Effectiveness of Technology-Assisted Case Management in Low Income Adults with Type 2 Diabetes**

  No reportable outcomes available at this time; waiting on USAMRMC ORT approval; upon receiving approval, we will be able to proceed with recruitment, enrollment and randomization of participants into the project.

- **Tele-Critical Care to Reduce Rural Health Disparities**

  Minority patients receiving chronic hemodialysis have increased rates of blood stream infections but do not have increased rates of sepsis. This population does not represent the best opportunity to improve outcomes of critical illness among under-represented minorities.

There is no published literature reporting successful efforts at regionalization of critical care in the United States. The only published literature on this topic is derived from expert opinion. There is minimal knowledge regarding barriers and enablers to regionalization of critical care. Conceptually it will be necessary to implement multi-faceted interventions based on inter-hospital collaborations to improve the access to appropriate care and patient outcomes.

- **Lean Team Initiative**

While we have not yet begun any research, we have continued activities under the goals and objectives of this grant that are detailed in the **Table 15**:

Table 15: MUSC Lean Team Activities

Activity	Population	Target	Achieved- QTR 4	Achieved to date
Individual assessments and counseling				
Nutritional assessment (BMI, body fat)	JROTC		0 JROTC students and 0 instructors	155 JROTC students and 3 instructors(instructional training session not study related)
	Other students (non-ROTC)		250 high school students 850 middle school students	65 dental students 301 high school students 850 middle school students
Social networking				
Maintenance of Facebook page for information dissemination	Community		Facebook page followed by 17 people	Facebook page followed by 17 people
Maintenance of Twitter account for information dissemination	Community		Twitter account followed by 9 new people	Twitter account 65 followers
Classroom education				
Nutritional education sessions (classroom-based)	JROTC			8 education sessions (2 per individual); 40 students reached
	Other CCSD students (non-ROTC)		2 high school PE 2 high school HE 0 middle school PE 3high school CA	7 Health Science Career Education classes 4 HS PE 4 HS HE 1 MS PE 4 HS CA
Junior League Fresh Friday tasting events/nutrition education session for local schools	1 local middle school		200 6-8th grade students and staff reached with fresh fruit and/or vegetable tasting (monthly event)	200 6-8th grade students and staff reached with each monthly event
School Wellness Councils				
Adopt-A-School	79 CCSD schools	By January 1, 2012, all 79 schools will be adopted by a local MD	3 additional doctors have adopted a local school	60 doctors have adopted a local school
Doc Adopt Training	79 CCSD Schools	By December 1, 2010 37 physicians will be oriented and trained		60 physicians, school nurses, allied health professionals and wellness team champions received 2.5hrs of training
Activity	Population	Target	Achieved QTR 2	Achieved YTD

CCSD Wellness Day	5000 CCSD Employees	Oct 22, 2010 all CCSD employees offered health screenings and information		100 CCSD employees screened for BMI, Body Fat and Lifestyle behaviors
CCSD Wellness Email Club	5000 CCSD Employees	Established Oct 22, 2010 CCSD from employees who attended Wellness Day	4 additional CCSD employees signed up to receive health information via email	91 CCSD employees from 13 different schools and district office signed up to receive health information via email
Web-based activities				
Cooking event with MUSC dental students				70 students involved in cooking demonstration; 23 new recipes contributed to The Lean Team website for community access
Exercise Videos	40,000 CCSD School Teachers, Staff and Students	Focus on 1 middle and 1 high school		5 new videos were uploaded to Lean Team website and You Tube accounts
Emailing of The Lean Team weekly newsletter	General Community		18 new participants currently receive our weekly newsletter	530 community participants currently receive our weekly newsletter
Community activities				
Community bridge walk/run	General Community		494 participants; 2726 new miles walked (life total: 18,779)	929 participants; 3928 miles walked (life total: 21,505)
School-Based Walks	School	April 2, 2011	50 participants training for Cooper River Bridge Run	68 completed CRBR
Established local, tri-county Eat Smart, Move More chapter to bring community partners together on improving school nutrition and physical fitness			15 members joined; 4 new organizations represented; 4 Executive meeting and 1 General membership meetings held	144 members joined; 44 organizations represented; 7 Executive meetings and 2 General membership meetings held
Activity	Population	Target	Achieved QTR 2	Achieved YTD
Meetings attended to strengthen community partnerships			-School Wellness (5) -Collaborative (13) -Education/Awareness (4)	-School Wellness (28) -Collaborative (23) -Education/Awareness (11)
Orienting/training of MUSC dietetic interns to community rotation (2 weeks with The Lean Team)			10 oriented; 8 trained	10 oriented; 8 trained
Linkages made with other MUSC partners			Heart Health-obesity JDOH-obesity/education Center for Community Partnerships- ACHIEVE Palmetto Project-Stroke REACH- Diabetes Hollings Cancer Center	-10 students referred to obesity treatment program -exchange of resources and planning strategies
News media coverage of Lean Team	Local TV news stations and local print media		Lean Team was quoted in Newspaper articles related to Healthier School lunches	12 references to The Lean Team in local news media
Tools and Resources				**Year to Date**

-Nutrition Facts Poster (nutrient analysis of CCSD school menu items) -Healthy Kids Recipe Challenge contestant -New recipe (Confetti Soup) for school menu -DVD for welcoming Confetti Soup judges -"Docs Adopt" training manual - Updated Lean Team brochure -Forms/Questionnaires and protocol for research Study				Developed tools to be used in upcoming years to expand wellness initiatives in Charleston, Berkeley and Dorchester counties. -Nutrition Facts Poster (nutrient analysis of CCSD school menu items) -Healthy Kids Recipe Challenge contestant -New recipe (Confetti Soup) for school menu -DVD for welcoming Confetti Soup judges -"Docs Adopt" training manual - Updated Lean Team brochure -Forms and Questionnaires and protocol for Research Study

Obesity is an increasing problem in children and adolescents, which specifically impacts the fitness of military recruits.[42] The most common reason that recruits fail their enlistment physical is obesity and its related illnesses. Our program will improve the fitness of students throughout Charleston County and will develop interventions for JROTC students that can be utilized elsewhere. As obesity is a complex problem, our program uses a portfolio of approaches that include individual assessment as well as policy and environmental change addressing nutrition and exercise. During this first year of implementation we have developed innovative programs that have lead to increased physician involvement and enhanced school wellness efforts. Further refinement and evaluation of these components as well as the planned longitudinal evaluation of JROTC students will lead to reproducible, effective interventions that can be implemented in other schools and JROTC programs.

- **Community Engaged Scholars Initiative (CES)**
  - National/International Presentations:
    - Gillenwater, G., Newman, SC. (May 2011). Navigating the Policy Maze through Partnership. Campus-University Partnerships Expo. Waterloo Region, Canada.
    - Winkler, J., Cook, C., Warner, G. (May 2011). A Successful Research Partnership Engaging Community Partners and a Medical University. Campus-University Partnerships Expo. Waterloo Region, Canada.
    - Carpenter, B., Leite, R. (May 2011). Hollywood Smiles. Campus-University Partnerships Expo. Waterloo Region, Canada.
    - Cox, M., Andrews, J., Newman, S., Gillenwater, G., Leite, R., Carpenter, B., Winkler, J., Warner, G. (May 2011). Academic and Community Reflections on Preparing for Partnership & Research: Lessons from the Community Engaged Scholars Program. Campus-University Partnerships Expo. Waterloo Region, Canada.
    - Newman, S., Andrews, J., Cox, M., Gillenwater, G., Leite, R. (May 2011). Community Advisory Boards in Community-Based Participatory Research: Best Processes. Campus-University Partnerships Expo. Waterloo Region, Canada.
    - Andrews, J., Newman, S., Cox, M., Leite, R., Gillenwater, G., Warner, G., Winkler, J. (May 2011). Navigating the IRB in CBPR: Academic and Community Perspectives. Campus-University Partnerships Expo. Waterloo Region, Canada.

- Cox, M., Andrews, J. (November 2010). Building capacity for sustainable academic-community partnerships: A case study of the Community Engaged Scholars Program. American Public Health Association Annual Meeting. Denver, CO.
- Cox, M., Andrews, J. (March 2011). Achieving outcomes with CBPR: Lessons from the Community Engaged Scholars Program. American Academy of Health Behavior Annual Scientific Meeting. Hilton Head, SC.

o Grant submissions:
Community Engaged Assessment to facilitate Stroke Elimination (CEASE). Jauch (PI), Andrews (Co-PI). South Carolina Clinical and Translational Research Institute. April 2011. Not funded.

The CES has produced relevant results related to partnership capacity and sustainability. Markers of these results include formalized partnerships, publications, grant submissions led by community partners, national presentations by partner teams, and formalized plans for sustainability of the partnerships and projects. The Community Engaged Scholars Program serves as a model to build the capacity of both academic and community partners to conduct research that promotes sustainable mechanisms for attaining health equity in our communities. Future work will include adaptations of the current training model based on RFA announcements and additional training needs of academic and community partners.

- **Mobile Outreach Van, Educational and Navigatio n Health Services for Underserved Populations (MOVENUP)**

The Cancer Education Guide (CEG) Facilitator Training is a 4-hour evidence-based cancer education program in which a 3-hour component focused on general cancer information, a 30-minute component highlighted prostate cancer information, and a 30-minute component focused on cancer clinical trials information. The cancer knowledge component of the cancer education intervention was developed by the SC Cancer Alliance (SCCA) for general audiences with no expert knowledge about cancer. The prostate cancer knowledge component was developed by the American Cancer Society for lay audiences. Outcome measures that were assessed included pre- and post-intervention changes:

- General cancer knowledge
- Prostate cancer knowledge
- Perceived self-efficacy in patient-physician interaction
- Perceptions of cancer clinical trials

To measure general cancer knowledge, a 19-item instrument was developed by the investigative team. The instrument includes one item on prostate cancer, three items on breast cancer, one item on cervical cancer, one item on the HPV vaccine, one item on colon cancer, three items on skin cancer, and nine other cancer-related items addressing diet, exercise, tobacco use, family history, and myths.

Prostate cancer knowledge was measured by the 10-item PROCASE instrument.[43] The PROCASE was developed in a sample of male patients aged 50+ years receiving primary care at four participating VA Medical Centers in the Midwest. In terms of its reliability, the Kuder-Richardson 20 (KR-20), which measures the average intercorrelation of items with dichotomous responses, was 0.68.

Perceived self-efficacy in patient-physician communication about cancer was measured by a cancer adapted version of the 5-item Perceived Self-Efficacy in Patient-Physician Interactions (PEPPI) Scale. [44] These investigators created the scale to quantify older patients' self-efficacy in medical interactions with physicians. In their study, Maly et al. reported that the Cronbach's alpha was 0.83, indicating high reliability. Higher PEPPI scores are associated with higher levels of perceived self-efficacy in patient-physician interactions.

The 7-item Fallowfield instrument[45] was used to assess perceptions of cancer clinical trials. The items include the following: (1) Do you think that patients should be asked to take part in medical research? (2) …Would you be prepared to take part in a study comparing different treatments? (3) …Would you be prepared to take part in a study where treatment was chosen at random? (4) …Doctors and experts in the field do not know for sure if one treatment is better than the other, or if they are both the same, that's why they want to do the study. Would knowing that encourage you to take part? (5) ...In a random choice study, if the treatment you were receiving did not suit you for any reason, you could leave the study. Would that encourage you to take part? (6) …The doctor would tell you all about the two treatments being compared before you were
allocated to one or the other. Would that encourage you to take part? and (7) If you knew that … (a) either treatment was completely suitable (b) …you could leave the study … (c) …there is plenty of information… Would all these things together mean that you would change your mind and agree to take part?

Six additional survey items were included. These items assessed sociodemographic characteristics, including Hispanic ethnicity, race, education level, marital status, household income, age and gender.

Measures Section References

Radosevich DM, Partin MR, Nugent S, et al.: Measuring patient knowledge of the risks and benefits of prostate cancer screening. Patient Educ Couns 2004; 54(2): 143-52.

Maly RC, Leake B, Silliman RA: Breast cancer treatment in older women: impact of the patient-physician interaction. J Am Geriatr Soc 2004; 52(7): 1138-45.

Fallowfield LJ, Jenkins V, Brennan C, Sawtell M, Moynihan C, Souhami RL. Attitudes of patients to randomized clinical trials of cancer therapy. *Eur J Cancer*. 1998;34(10):1554-1559.

Statistical Methods

One of the summer undergraduate students from SC's Historically Black Colleges and Universities through the MOVENUP Program double-entered the data and compared them for verification of data entry. Analyses were completed using SPSS 16.0, SAS 9.1.3, and R v2.6.1. Scoring one point for each question an individual answered correctly created a knowledge score. The mean knowledge scores, standard deviations, and 95% confidence intervals was calculated. Partners who helped to support the CEG Facilitator training program:

- The South Carolina Cancer Alliance (SCCA), an 800-member statewide non-profit organization with membership from the lay community, public health associations and academia.
- The Hampton County Healthcare Consortium (SC Department of Health and Environmental Control Region 8 and Beaufort-Jasper-Hampton Comprehensive Health Services, Inc.)
- Town of Yemassee, SC
- Josie's Creative Design's, LLC of Yemassee, SC (caterer who provided the means for the cancer education training event)

Cancer Research Training Program with students from HBCU's in the I-95 Corridor

- **Ms. Janielle Samuel and Mr. Edw ard McMorris** were the two students in the Summer Research Training Program from Voorhees College, Denmark, SC. Each student prepared a research paper and gave a scientific presentation to their peers, mentors and other faculty at MUSC.
- **Ms. Samuel's** research involved testing protein glutathionylation levels In MCF7 breast cancer cells expressing glutathione S-transferase Pi Isoforms; her mentor was Dr. Danyelle Townsend. The following is a summary of her research project:

Protein Glutathionylation Levels In MCF7 Breast Cancer Cells Expressing Glutath ione S-transferase Pi Isoforms

Keywords and Abbreviations
Glutathione
Glutathione S-transferase pi
Oxidative Stress
Nitrosative Stress
GSH-Glutathione reduced
GSSG- Glutathione oxidized
GSTpi- Glutathione S-transferase
RNS- Reactive Nitrogen Species
PABA/NO- (02-{2,4-dinitro-5-[4-(N-methylamino)benzoyloxy]
PBS-Phosphate Buffered Saline

Resources:

- Pubmed
- *S*-Glutathionylation: Indicator of Cell Stress and Regulator of the Unfolded Protein Response.
- Novel Role for Glutathione *S*-Transferase π, REGULATOR OF PROTEIN S-GLUTATHIONYLATION FOLLOWING OXIDATIVE AND NITROSATIVE STRESS.
- www.wikipedia.com

S-Glutathionylation is a redox- regulated posttranslational modification of protein cysteine residues by the addition of the tripeptide glutathione. It is promoted by oxidative and nitrosative stress. The disulfide bond between glutathione and a protein is reversible. S-Glutathionylation is similar to phosphorylation because it alters protein structure and function such as activation of protein enzyme activity. S-glutathionylation alters the function of enzymes, receptors and structural proteins. S-glutathionylation if proteins are critical to cellular stress response but the characteristics of the forward reaction are not completely known. However, results have shown that GSTpi potentiates S-glutathionylation reactions. Glutathione S- transferase pi is a subgroup of GST family. The GSTpi gene is polymorphic gene encoding active, functionally different GSTpi proteins, which provides cellular protection against free radical and carcinogenic compounds. The first reported example of kinase regulation by a GST was in the inhibition of c-Jun aminoterminal kinase (JNK) by a pi class. JNK a stress activated kinases, has been implicated in pro-apoptotic signaling and my mediate the cytotoxicity of a variety of chemotherapeutic agents. Due to its detoxifying function GSTpi is a marker protein in many cancers. The pi class is present at high levels in many solid tumors, such as ovarian, breast, liver, pancreas, colon and lymphomas. GST pi has been indicated to be over expresses in drug resistant tumors. Because GSTpi has been implicated in the forward reaction of S-glutathionylation, we are interested in understanding how polymorphism may alter cellular responses for both oxidative and nitrosative stress. As such, the four alleles of GSTpi have been transfected into MCF7 breast cancer cells and we are testing the rate and extend the S-Glutathionylation via western blot analysis.

Materials:

PABA/NO was prepared and provided by Dr. Larry Keefer (Basic Research Program), Anti-Actin {Abcam Inc.},Anti -GSTpi {MBL Medical & Biological Laboratories Co.},Anti -GSH {Virogen}, Anti-Mouse {GE Healthcare UK Limited}, Anti-Rabbit {GE Healthcare UK Limited}

Cell Lines

Human MCF7 Breast Cancer Cells .MCF7 cells were transfected with pCMV-Tag2a-Flag GSTpi A, B,C,D, Y7F by GenJet In Vitro DNA Transfection Reagent for MCF-7 Cells (SignaGen Laboratories, Ijamsville, MD) according to protocol, and was cultured in DMEM,1X (Dublbecco's Modification of Eagle's Medium) {Mediatech, Inc.},supplemented with 10% fetal bovine serum{ Hyclone, Logan,

Utah}, 1% L-glutamine {Invitrogen, Carlsbad, CA}, 1% Penicillin-Streptomycin {cellgro}, Trypsin EDTA,1X {Mediatech,Inc}, PBS pH 7.4(Phosphate Buffered Saline 1X) {invitrogen}, Serum Free DMEM..

Immunoblot

Equal amounts of protein were separated on 10% SDS polyacrylamide gels and transferred overnight onto PVDF membranes {BioRad}. Non-specific binding was reduced by incubating the membrane in 10% blocking buffer for 1h containing 20 mM Tris-HCL, pH 7.5,150 mM NaCl, 5% Milk.

Methods:

Cells grow in the DMEM solution.

Day 1: Split the cells, which consist of putting 500,000 cells in each of the 12 wells. Label the wells E, Y, A, B, C, D.

Day 2: Transfection – 200µl of serum free DMEM in 2 separate tubes. In 1 tube add 10ml of transfection reagent and in the other tube add 4µg of DNA which are 1.8µl, 3.0µ, 1.5µl, 2.4µl, 2.7µl, 3.0µl. So 6 tubes will have 10µl transfection reagent and 200µl and 6 tubes will have the DNA and 200µl. Label the tubes with the tubes with the different amount of DNA and transfection reagent in this order: E, Y, A, B, C, D. Then add the transfection reagent to the DNA in the order of EE, YY, AA, BB,CC ,DD and let that sit for 15 minutes. Fill the wells in the plates with 800µl of DMEM. Then take 200µl out of the T.R. and DNA mixture and add it to the appropriate well. Incubate for 5hrs, you would then remove the mixture and add 2ml of DMEM into each well.

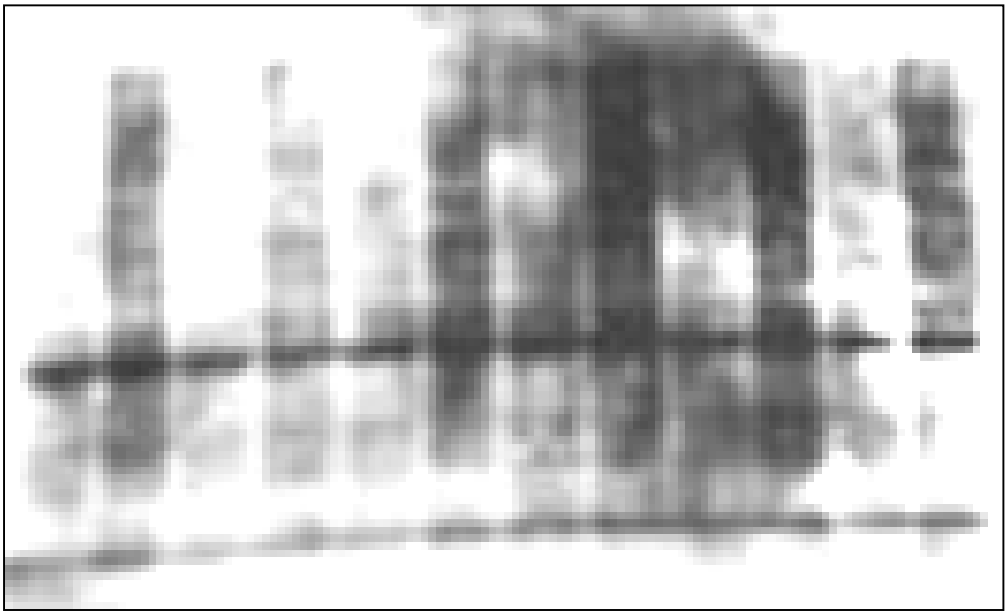
Day 4: PABA/NO treatment- Remove all media from the plate that you choose to drug. Put 2µl of PABA/NO into 10ml of DMEM, use the pipet to mix it immediately. Then put 1ml of the mixture into each of the 6 wells on the plate you chose to drug. Let that stay for 10 minutes (time is critical). Then we removed all the media from all 12 of the wells. We rinsed with PBS and removed. We then added 200µl of Lysis Buffer to each well. Using a buffer spatula scrap the cells in an downward motion, and place into corresponding tubes, labeled E,Y,A,B,C,D. Put on ice for 30 minutes vortexing every 10 minutes. Centrifuge for 10 minutes at 12,000 rpms, and make up the dye for the Bradford. After we get the Protein Assay Analysis Sample we do the gel electrophoresis. Transfer to membrane overnight.

Day 5: Probing

Table 16. Probing

Block	5%milk	1hr
GSH Antibody		4hrs
TBST	Rinse	30min
Mouse Antibody		1hr 30mins
TBST	Rinse	30 mins
Film		
Strip	Stripping Buffer	15 mins
TBST	Rinse	30mins
Block	5%milk	1hr
GSTpi Antibody		2hrs

TBST	Rinse	30min
Rabbit Antibody		1hr 30mins
TBST	Rinse	30mins
Film		
Strip	Stripping Buffer	15mins
TBST	Rinse	30mins
Block	5%milk	1hr
Actin Antibody		2hrs
TBST	Rinse	30min
Rabbit Antibody		1hr 30mins
TBST	Rinse	30mins
Film		



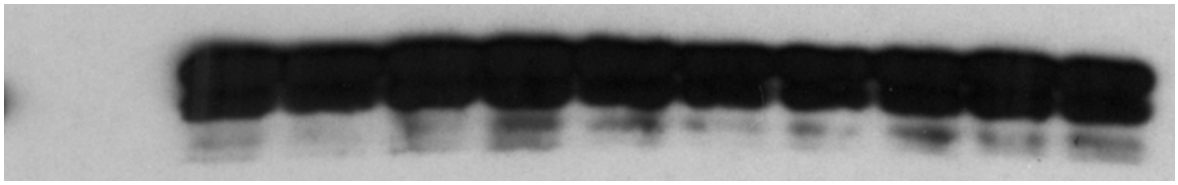
GSSG

\- + - + - + - + - + - +

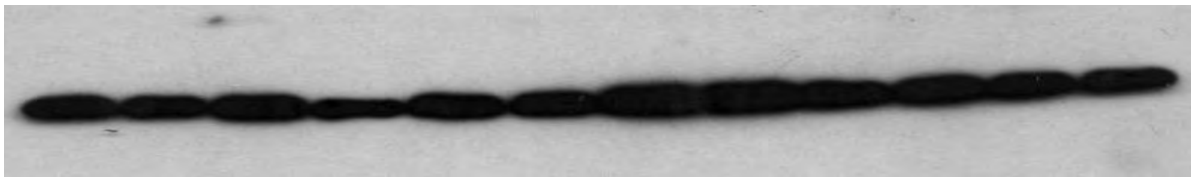
PABA/NO

This is the GSSG film and as you can see Glutathionylation did take place. Wherever there is a negative sign there is no PABA/NO and wherever there is an positive sign PABA/NO is present.

1 2 3 4 5 6 7 8 9 10 11 12

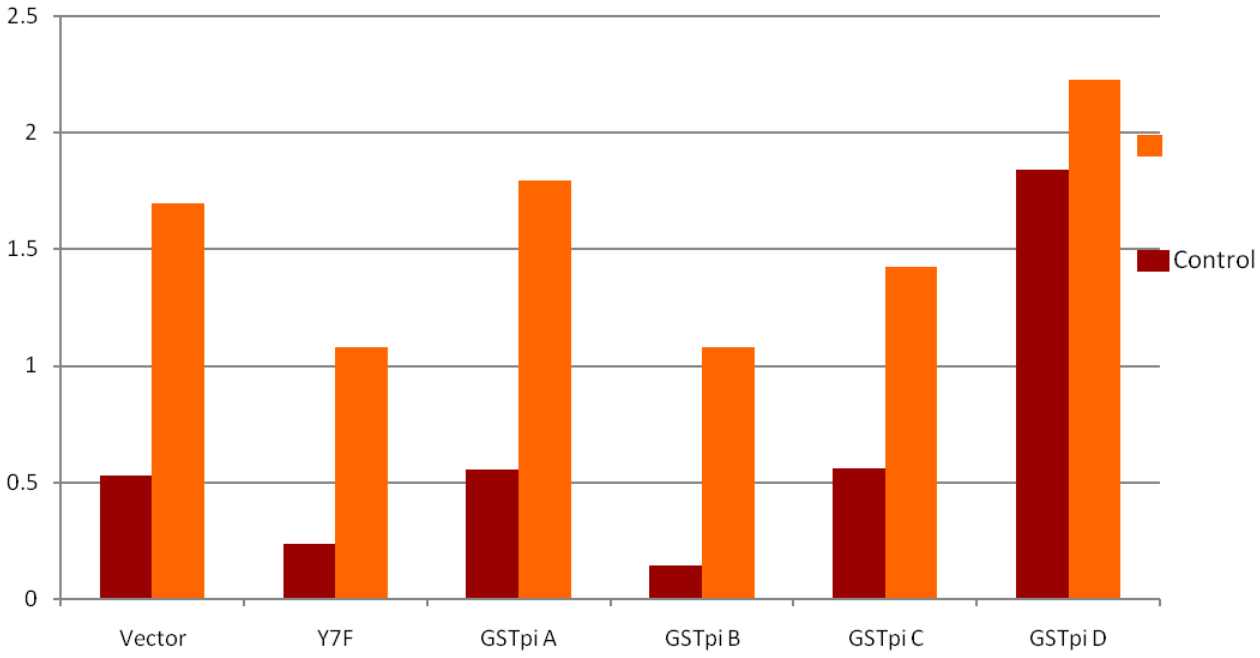


Vector Y7F GSTpi A GSTpi B GSTpi C GSTpi D GSTpi



In this film it shows that GSTpi is present

Actin



This film is showing Actin and Actin is the loading control NO and red is Control. Further experiments are needed.

This film is showing Actin and Actin is the loading control NO and red is Control. Further experiments are needed.

Mr. McMorris conducted research in the MUSC Department of Microbiology and Immunology his mentor was Dr. James S. Norris. His research focused on acid ceramidase overexpression and its role in the activation of and addiction to Akt signaling in prostate cancer. The following is a summary of his research project:

Acid Ceramidase overexpression causes activation of and addiction to Akt signaling in prostate cancer

Previous studies have demonstrated the role of the ceramide metabolizing enzyme acid ceramidase in promoting an aggressive cancer phenotype in prostate cancer cell lines. In addition, it has been found that greater than 80% of prostate tumors overexpress acid ceramidase, suggesting that acid ceramidase may be an important mediator of development and progression of prostate cancer. In this study, we demonstrate that the increased rate of proliferation in acid ceramidase overexpressing cells is dependent on signaling through the oncogenic PI3K/Akt pathway. In addition, we found that acid ceramidase overexpressing cells are more sensitive to Akt inhibition than control cells, suggesting that acid ceramidase overexpressing tumors are addicted to Akt signaling. These findings highlight the importance of investigating the Akt pathway as a potential therapeutic target in acid ceramidase overexpressing tumors.

Prostate Cancer

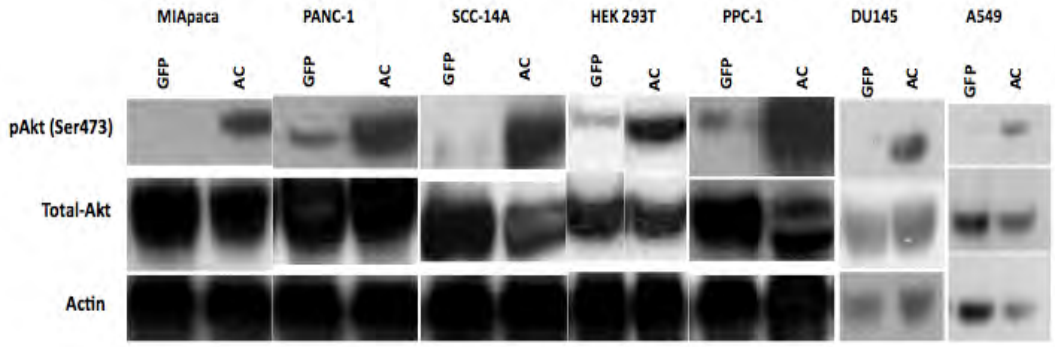
Prostate Cancer is the second leading cause of cancer related death in men. This type of cancer was first discovered by a Venetian anatomist Niccolò Massa in 1853.[46] When this disease was discovered it was considered a rare disease because many scientist and doctors were not familiar with the human organ called the Prostate, life expectancy rates were increasingly low and poor detection methods. The first treatments of prostate cancer were surgeries to relieve urinary obstruction. Removal of the entire gland was first performed in 1904 by Hugh H. Young at Johns Hopkins Hospital. The second treatment to prevent Prostate Cancer was the surgical removal of the testes which was first performed in the 1890s, but had limited success. Another option, Transurethral resection of the prostate replaced radical prostatectomy for symptomatic relief of obstruction in the middle of the 20th century because it could better preserve penile erectile function. Radical retropubic prostatectomy was developed in 1983 by Patrick Walsh This surgical approach allowed for removal of the prostate and lymph nodes with maintenance of penile function.[46] It was not until the 20th century doctors and scientist turned to radiation to prevent and treat Prostate Cancer. The use of External beam radiation became more popular as stronger radiation sources became available in the middle of the 20th century.

Today scientists are still trying to find a specific cause of Prostate Cancer. A man's risk of developing prostate cancer is related to his age, genetics, race, diet, lifestyle, medications, and other factors. The primary risk factor is age. Prostate cancer is very uncommon in men younger than 45, but becomes more common with advancing age. The average age at the time of diagnosis is 70. However, many men never know they have prostate cancer. Autopsy studies of Chinese, German, Israeli, Jamaican, Swedish, and Ugandan men who died of other causes have found prostate cancer in thirty percent of men in their 50's, and in eighty percent of men in their 70's.[47] In the United States in 2010, there were an estimated 217,730 new cases of prostate cancer and 32,050 deaths due to prostate cancer. Since the death toll rises every year it was a great need to study prostate cancer.

Advance studies shows when prostate cancer grows outside the prostate gland and spread to tissue in the pelvis. When this occurs it is called local spread. Local spread is very important to stop because the cancer cells could affect major components of the body, and usually spread to the bones. If cells break away from the main tumor it could infect the lymphatic system and blood stream. When this happen the lymphatic system cannot fight of any infection, and in the blood stream it could travel to other areas and start growing. When cell start to lodge in other places it could grow a secondary tumor that could

metastases in the liver, lungs, or the brain, but it is very common. Once the prostate cancer cell spread beyond a point the cure rates and clinical treatments drop dramatically.

Therefore, advanced studies started to emphasis on sphingolipids ceramide, sphingosine-1-phosphate (S1P) and acid ceramidase. Ceramide mediates many cell stress response, including cell senescence and regulate apoptosis, but sphingosine-1-phosphate has a role of cell survival, migration, and inflammation. Acid ceramidase (AC) is up regulated in 60% of primary prostate cancer tissue, suggesting that acid ceramidase plays a role in tumor growth. When ceramide and Acid ceramidase metabolized it forms sphingosine which quickly convert to sphingosine-1-phosphate which promote tumor growth or signaling. Therefore the Norris lab has observed that acid ceramidase overexpression activates the oncogenic Akt. Akt is a serine/threonine protein kinase that plays a key role in multiple cellular processes such as cell proliferation, apoptosis, transcription and cell migration. Also it plays a role in cellular survival pathways, by inhibiting apoptotic processes. Interestingly, acid ceramidase overexpressing activates Akt in multiple cell lines of Akt, which could indicate that the acid ceramidase overexpressing cells are addicted to Akt signaling.



Therefore, I will compare the small molecule Akt inhibitor Akt inhibitor X (Calbiochem) with the clinically investigated inhibitor periofosine. I will compare the effects of these Akt inhibitors on Akt activation by western blotting and on cell proliferation using proliferation and clonogenic assays. I will also test the hypothesis that sustained acid ceramidase overexpression causes Akt "addiction" by comparing acute acid ceramidase overexpression with transient adenoviral delivery of acid ceramidase.

Method and Material

Adenoviral Delivery of AC:

.5x10^6 cells were infected at MOI of 50 in suspension in 2 ml serum free RPMI 1640 then plated in 60 mm dishes. After 6 hours 2 ml of RPMI 1640 supplemented with 10% bovine growth serum was added. Cells were collected at 48 hours for western blotting.

Western blotting:

Proteins are harvested by scraping plates and aspirating cells and media. Cells will be pelleted by centrifugation at 500 rcf for 5 minutes, including one wash with cold PBS. Cells then will be lysed by 30 minutes incubation with RIPA buffer (20 mM Tris pH 7.5, 100mM NaCl, .5% NP-40, .5 mM EDTA, .5 mM PMSF) containing protease inhibitors (Halt Protease Inhibitor Cocktail, Pierce, Rockford, IL) on ice followed by centrifugation at 14,000 rcf at 4˚C. Supernatant containing total cellular protein will be reserved and to it added SDS to a final concentration of .2% SDS. Protein concentration will be determined by BCA Protein Assay (Pierce, Rockford, IL) according to the manufacturer's protocol. 50µg of protein will be incubated for 10 minutes at 95˚C with NuPAGE LDS Sample Buffer 4X (10% glycerol, 141 mM Tris base, 10mM, 106mM Tris HCl, 2% LDS, 0.51 mM EDTA, 0.22 mM SERVA® Blue G250, 0.175 mM Phenol red, pH 8.5, Invitrogen, Carlsbad, CA) and loaded into Invitrogen 4-12% SDS-PAGE Bis-Tris gels with Full Range Rainbow molecular weight markers (GE Healthcare,

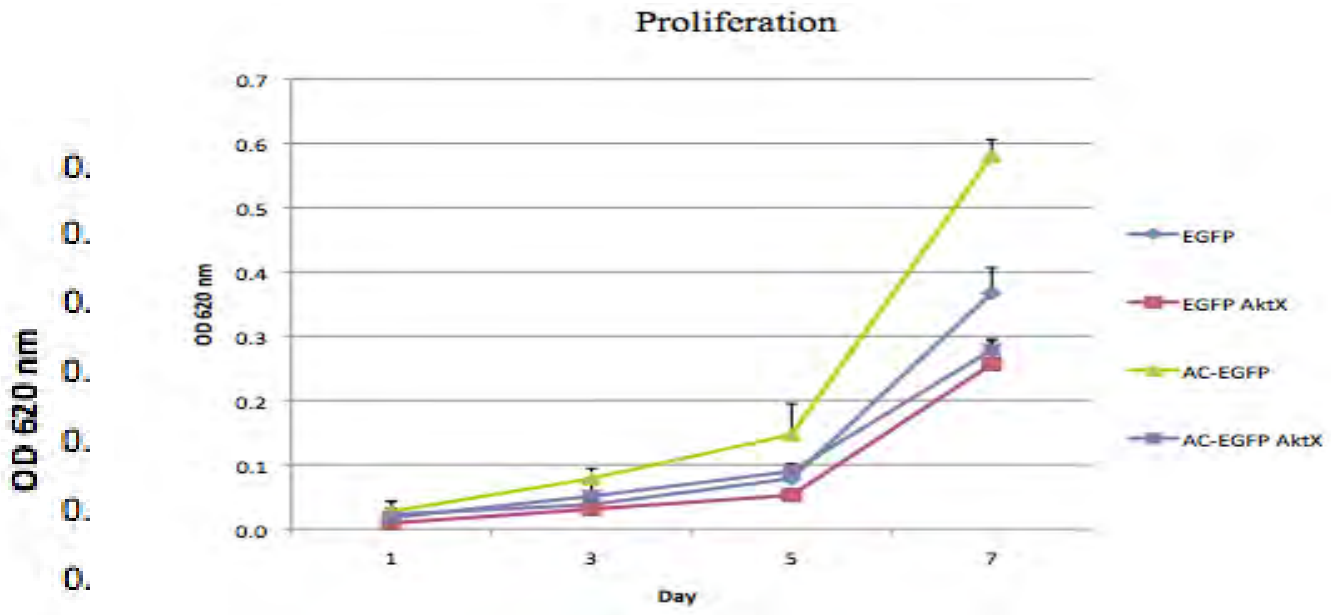
Piscataway, NJ) and resolved at 200 V for one hour. Then gel will be transferred onto nitrocellulose membranes. Membranes will then be blocked with .5% Milk in TBS-T (Tris buffered saline with .1% Tween-20) for 30 minutes at RT. Primary antibodies will be diluted to optimum concentrations and applied overnight at 4˚C. The membrane will be transferred to a Millipore SnapID vacuum apparatus for washing (1x with 50 ml TBS-T), secondary antibody binding (10-15 minute incubation with horseradish peroxidase (HRP) conjugated antibody), and a final wash (1x with 50 ml TBS-T) before application of Millipore HRP chemiluminescent substrate for 5 minutes.

Cell Proliferation Assay:

Cells were treated in suspension with either vehicle (water), 2.5 µM Akt inhibitor X, or 5.0 µM Perifosine 3 x 10^3 cells were seeded per well in 24-well cell culture plates in RPMI 1640 supplemented with 2% bovine growth serum. On each collection day (day 1, 3, 5, and 7) media was aspirated and cells were fixed with 150 µL 3.7% formalin for 15 minutes. 150µL of crystal violet (5 mg/ml, 2% ethanol) was added to each well and plates were placed on the shaker for 15 minutes. Plates were washed by submersion in water 5 times then allowed to air dry. Stain was dissolved in 2% SDS and quantified by absorbance at 620 nm.

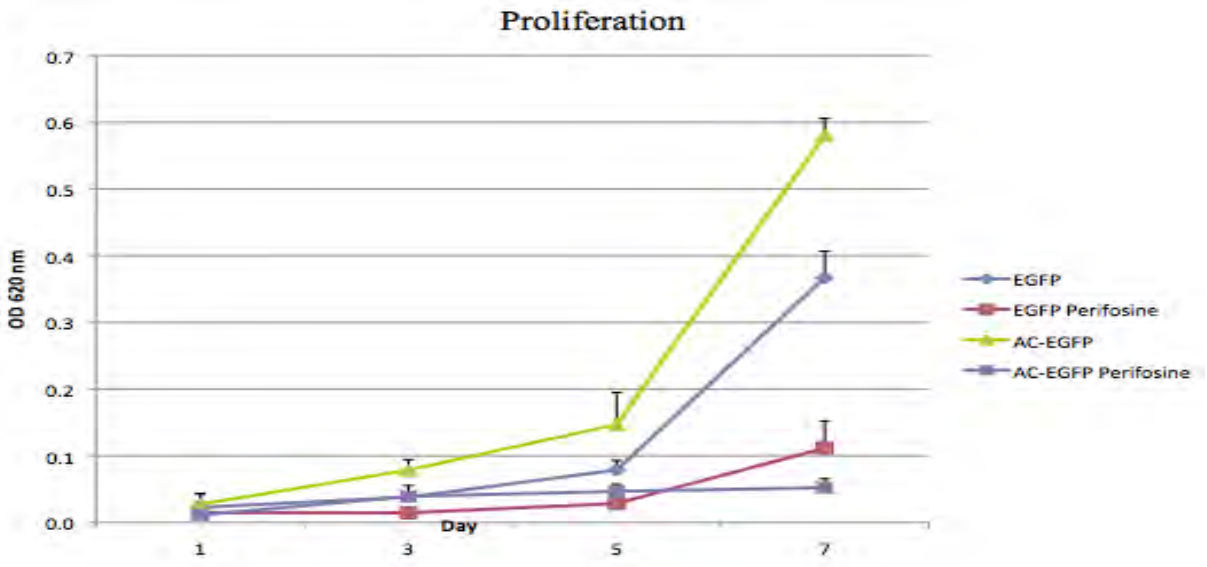
Results:

Akt Inhibitor X



Results:

Perifosine



Discussion:

Akt X and Perifosine lead to enhanced pro-apoptotic signaling through ceramide accumulation and prevent conversion of ceramide to sphingosine, which decreases formation of S1P and anti-apoptotic signaling. The result shows acid cermidase increase signaling though Akt, and the Akt pathway may be a good therapeutic target for AC overexpressing prostate cancer. Also Akt X and Perifosine Inhibition of Akt abolish the proliferation advantage of Acid ceramidase overexpression cells.

During the first year of the mobile outreach van, educational, and navigation health services for underserved populations (MOVENUP Program) the Tasks; as outlined in the Statement of Work, were met successfully.

We provided Mobile Health Unit Services and Patient Navigation Services in the I-95 Corridor Counties and has begun to build capacity in health care access by providing screening on the mobile health unit. We coordinated and linked with other healthcare organizations in the six counties, including the hospitals, Federally Qualified Community Health Centers (FQHCs), and private physicians. We renewed our relationships with our existing community agencies and organizations including: SC Department of Health and Environmental Control, Bureau of Chronic Disease; Department of Social Services; Palmetto Health Care; the federally funded breast and cervical cancer screening program, the *Best Chance Network;* the SC Cancer Alliance; and the American Cancer Society.

We identified and created a community coalition of partners in the I-95 Corridor to assist with achieving the long range goal to reduce disparities in cancer services access, morbidity and mortality in the I-95 Corridor which represents a vital opportunity and a valuable resource for improving health outcomes and fostering economic development.

We provided Cancer Education Awareness and Education Related to Nutrition/Physical Activity to communities in the I-95 Corridor Counties through our community based Cancer Education Guide

(CEG) Facilitator training program using the "Train the Trainer" model. The training program included information pertaining to the importance of African American participation in cancer screening, early detection, and cancer clinical trials.

We initiated a process to recruit undergraduate students from HBCU's to become the next generation of prostate cancer researchers by exposing them to prostate cancer research at the Medical University of South Carolina (MUSC), and training them to meaningfully participate in such research activities and become the pipeline for future generations of cancer researchers. Two (2) students from HBCU's in the I-95 Corridor successfully completed the MUSC's Summer Undergraduate Research Program (SURP) and we are in the process of identifying students to participate in the SURP during the summer of 2011.

- **Health Empowerment Zone**
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  - Diaz, V. A., Mainous, A. G., Williamson, D. Johnson, S. P., Knoll, M. (2011) Cardiovascular and Diabetes Risk Perception in a Hispanic Community Sample (submitted May 2011, American Journal of Public Health.
  - Williamson, D.C., (May 2011) Community Engagement for Systems, Policy and Environmental Change. Florence Community Leaders Institute, Health Disparities Panel, Florence, South Carolina.
  - "Tracking food availability, health indicators & the price of food" (submission November 2011) NIFA Community Food Projects Planning Grant (notification September 2011)
  - Media
    - Channel 5 News, "Food Desert in North Charleston" (August 2011)
    - Interviews of the student and a community member conducted by local news anchor Caroline Murray, aired during the evening news, and posted on the news website.
  - Award - MUSC Gives Back Student Volunteer Award for health promotion activities in the Latino community (April 2011)

This very productive organizational year has been highlighted by new partnerships and collaborative activities. Outcomes have included formalized partnerships, publications, a grant submission led by a community partner, and numerous community education events. One of the major challenges for community work is to foster the partnerships and recognize that the pace of activities is dependent on the priorities of the community member or agency. Our work is becoming recognized in the community and we are seen as the go to group for community linkages. For example, we were recently approached to assist the WIC program in SCDHEC, Region 7 with identifying why only 55% of farmers market vouchers were utilized in 2010 and to assist in the development of community strategies to increase utilization this summer. This is consistent with the goals and objectives of the project and we will begin work in this area in July. Our model builds community capacity through education, community data collection, and community collaboration with academic partners to achieve systems, policy and environmental change.

- **Healthy People in Healthy Communities**
  - **Publications**
    - **Abstracts**:
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      - Wagner CS, Egan B. Methods for fast and accurate normalization of real-world prescription data: A report from the OQUIN Hypertension Initiative. *J Clin Hypertens*. 2011;13[Suppl 1]:A138.
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    - **Original Papers:**
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      - Sowers JR, Raij LO, Kialal I, Egan BM, Ofili EO, Samuel R, Zappe DH, Purkayastha D, Deedwania PC. Metabolic effects of combination angiotensin receptor blocker/hydrochlorothiazide in prediabetic, obese, hypertensive patients. *J Hypertension* 2010;28:1761–1769.
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- Allaire BT, Trogdon JG, Egan BM, Lackland DT, Masters D. Measuring the impact of a continuing medical education program on patient blood pressure. *J Clin Hypertens.* 2011;doi: 10.1111/j.1751–7176.2011.00469.x [online].
- Egan BM, Laken MA, Wagner CS, Mack SS, Seymour-Edwards K, Dodson J, Zhao Y, Lackland DT. Impacting population cardiovascular health through a community-based practice network: Update on an ASH-supported collaborative. *J Clin Hypertens.* 2011;(in press).

▪ **Related Grant Support**:

- **Active:**
  - NHLBI HL091841, "Collaborative model to improve BP control and minimize racial disparities. 03/09/09–04/30/12. Total costs $8,482,800. B. Egan, Consultant; PI, Barry Carter, Iowa.
  - NIH R34 HL105880-01, "Controlling blood pressure in treatment resistant hypertension: A pilot study." B. Egan, PI; M. Laken, Co-PI; $450,000 TDC project, 6/1/11–5/31/13.
  - SC DHEC, Tobacco control and heart disease and stroke prevention. B. Egan, PI. $90,000 project, 7/1/11–6/30/13.
- **Pending**:
  - NIH R34 "Reducing the trajectory and racial disparities from pre-hypertension to hypertension. B. Egan, PI; M. Laken, Co-PI; $450,000 TDC project, 03/01/12–02/28/14.

- **Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population**
  - First partner site is in place- Andrews Medical Center
  - Credentialing obtained for MUSC research staff to conduct research activities with Andrews Medical Center
  - Collaborative Institutional Training Initiative completed for Andrews Medical Center staff to participate in human subjects research
  - Federal Wide Assurance obtained for Andrews Medical Center to validate assurance of compliance with federal regulations for the protection of human subjects in research
  - Marketing materials to include brochure and handout created for patient recruitment (included in Appendix)
  - Marketing materials created for physician referral marketing (included in Appendix)
  - Presentation with executive team of Black River Healthcare system to include the Chief Executive Officer, Human Resources/Staff Development Director, Medical Director, Operations Director, Clinical Director of Services, Finance Director, and head nursing staff.
  - Equipment need to carry out telemedicine procedures has been purchased. Equipment includes Tandberg Movi high definition video and Apple MacBook laptops for MUSC research site and Andrews Medical Center site
  - The RedCap Database specific to this project has been created and is undergoing final proofreading and testing to ensure appropriate access and use at the time patient evaluations begin.
  - The team worked with MUSC's Director of Academic and Research Systems to create the appropriate web based application to upload, share, and store all documents related to the evaluation of patients seen through this telemedicine project. The program to be used is MUSC Filelocker.

The first year of this project has been successful in completing the necessary start-up procedures in order to carry out the next phase of patient evaluation and data collection. While there have been challenges

throughout the year in establishing partner site commitment and seeking MUSC IRB and Telemedicine and Advanced Technology Research Center approval, the project team has addressed these challenges. It is expected that this project will have approval by June or July, 2011. The project team anticipates beginning patient evaluation at the beginning of year two of this project.

While one partner site is currently in place, additional partner sites will be added throughout year two. Facilities of particular interest in this project are those in counties within the I-95 corridor as well as coastal counties of SC. Counties of interest include: Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Clarendon, Colleton, Darlington, Dillon, Dorchester, Florence, Georgetown, Hampton, Horry, Jasper, Lee, Marion, Marlboro, Orangeburg, Sumter, Williamsburg. Rural Americans face a unique combination of factors (economic, cultural and social, and geography) that create disparities in health care. Facilities will be selected based on the ability to address health disparities through this project. The success of this project will rely on the opportunity to partner with rural healthcare facilities that offer the advantage of specifically targeting an African American population.

The project team is excited about the opportunity to collaborate with the South Carolina Area Health Education Consortium. The project team has identified ten facilities in which to begin immediate discussion and presentations of this project. The opportunity to utilize existing resources and healthcare professionals within rural hospitals and facilities will make an impact on the success of this project. The project team is thrilled to have the support of the South Carolina Area Health Education Consortium, and as a result, a greater number of rural African American patients could potentially be evaluated through this Telemedicine project.

The project team anticipates a successful year two of this project in which patient recruitment and evaluations can begin. The opportunity to collaborate with other state-wide researchers within the Sea Islands and Gullah communities, the utilization of existing resources through the South Carolina Area Health Education Consortium, and the potential to collaborate with fellow SE VIEW program team leaders will be vital in the success of the use of telemedicine in the evaluation of Alzheimer’s disease in rural, African American populations throughout year two.

Conclusion

SE VIEW, Co-investigators and Administrative Core has implemented 13 robust community-based research and service outreach programs designed to reduce health disparities. These efforts are expected to reduce the rejection rate as well as improve the enlistment opportunities and tenure of active duty military personnel.
The Administrative Core delivered strategic consultation, infrastructure, and quality process support to ensure proper directional, logistics, financial transactions, regulatory compliance, collaborative exchange, community capacity building, and execution alignments with all stated goals and objectives. An evaluation planning process, inclusive of an evaluation logic model to identify SE VIEW success objectives, was developed and is being implemented.

The 13 community-based research and service outreach programs are actively aligned under three domains. SE VIEW provided **educational programs** including a national conference on health disparities, three community leadership institutes, a summer health careers academy for high school and undergraduate students, and provided protected time for health disparities research and regulatory training for two MUSC junior faculty members. **Preventative medicine, health and wellness programs** involved establishing infrastructure for the delivery of specialized medical expertise in stroke intervention, pediatric cardiology, critical care, and diabetes management to individuals, groups, FQHCs, and rural/community hospitals. SE VIEW **community partnerships and outreach programs** encompassed numerous collaborative initiatives with individuals, schools, churches, worksites, health practices, and local governing/policy groups.

The infrastructure that has been implemented during the first year will serve as a foundation that will help SE VIEW achieve its stated goals.

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Appendix 1

Southeastern Virtual Institute for Health Equity and Wellness
SE VIEW
Friday, September 10, 2010
Meeting Minutes

Attendance Report

SE VIEW Core Administrative Team Present: Sabra Slaughter, PhD, Thomas Gordon, PhD, MHA, Jennifer Friday, PhD, Tracey Smith, MHA

Co-Investigators Present: David Rivers, MA, Robert Adams, MD, Dan Lackland, DrPH, Melissa Henshaw, MD, Leonard Egede, MD, MS, Dee Ford, MD, Nyssa Burbin (for Jacobo Mintzer, MD), Jan Key, MD, Jeannette Andrews, PhD, Deborah Williamson, DHA, CNM, Marvella Ford, PhD, and Brent Egan, MD

USAMRMC ORT Program Officer Present: Wilbur Malloy

Opening Remarks from Dr. Sabra Slaughter

Dr. Sabra Slaughter thanked everyone for their attendance and introduced the USAMRMC ORT Program Officer, SE VIEW Co-Investigators and the SE VIEW Core Administrative Team.

USAMRMC ORT Briefing

Wilbur Malloy, USAMRMC ORT Program Officer, presented information regarding USAMRMC ORT to include its mission and vision, core medical program areas, strategies, key initiatives and other key USAMRMC ORT personnel. The other key USAMRMC ORT personnel include Mae Hinnant, Project Officer, and Dr. Jeffrey Stephenson, ORP Liaison. Mr. Malloy also provided a pertinent strategy or "path to success" that will allow the Co-Investigators and Core Administrative Team to be successful.

Two reports were distributed: The National Partnership for Action and the 2009 USAMRMC ORT Annual Report. Mr. Malloy also recommended several other actions:

- Attendance at the upcoming Telemedicine Association meeting
- The Product Line Review (PLR) should be submitted approximately 22 months into the operation
- Reserve a seat on the SE VIEW's External Advisory Committee for a USAMRMC ORT representative

SE VIEW Briefing

Dr. Sabra Slaughter presented information regarding the SE VIEW model, goals and objectives, and Phase 1 Milestones. Please review the following overview of SE VIEW and its military relevance:

Southeastern Virtual Institute for Health Equity and Wellness
SE VIEW Summary

South Carolina and many other states in the southeast share a disproportionate burden of chronic maladies--such as diabetes mellitus, hypertension, and many types of cancer, metabolic syndrome, and periodontal disease. The problem is compounded by the rural nature of these states, and ethnic and socio-economic disparities that amplify the incidence, prevalence, and complications associated with these diagnoses. With escalating health care costs impacting federal, state, and employer budgets, the economic consequences of disparities could be a key driver to effecting change and improving the quality of care for many Americans. The Medical University of South Carolina (MUSC) proposes to address these burdens in South Carolina, and ultimately other states in the southeast, by establishing the

Southeastern Virtual Institute for Heath Equity and Wellness (SE VIEW). The vision of SE VIEW is to develop a nationally recognized, multidisciplinary, inter-professional team, of researchers, educators, outreach professional and laypersons to eliminate health disparities.

SE VIEW investigators and partners will leverage considerable institutional research knowledge and proven community partnerships to reduce the disproportionate burden of chronic diseases (e.g. diabetes, hypertension, obesity, cancer, stroke, cardiovascular disease) in South Carolina and ultimately other states in the southeast. The southeastern region of the United States has historically been fertile recruiting territory for the U S Military, the eradication of health disparities relates not only to health eligibility standards for enlistment but also to the health of current military personnel, military dependents, and veterans, as well as the health of the American public as a whole. Through a series of community-based research and service outreach initiatives, the SE VIEW will have a positive impact on the health of Americans and effectively reduce the health risk factors that prevent military enlistment and the functional tenure of active duty personnel.

SE VIEW Program Presentations

Each Co-Investigator presented details about their projects and provided information on how their program is designed to help reduce health disparities. Please review the following overview of each program presentation:

- **MUSC Public Information and Community Outreach (PICO) Initiative**
  This program is designed to increase awareness of chronic health issues in communities that bear a disproportionate burden of chronic diseases. The focus is on the role of government (intergovernmental relationship between federal, state and local governments), health disparities and issues, and youth issues and challenges. (David E. Rivers, MA, Assistant Professor of Library Science and Informatics; Director of Public Information and Community Outreach)
- **Community Institutes for Traditional and Nontraditional Leaders**
  This initiative focuses on the relationship between environmental protection, human health, environmental justice, and economic and community development. This initiative is unique in that it seeks to engage the leaders and policy makers of each community to implement programs. (David E. Rivers, MA, Assistant Professor of Library Science and Informatics; Director of Public Information and Community Outreach)
  Sabra's Notes: Presentation highlighted the influence of social determinants of health and the importance of prevention in reducing health disparities. Discussion included the comment about standardization and packaging what works in educational programs and incorporating non-experimental research models and tools that might be adopted.

- **Stroke and Stroke Risk Reduction Initiative**
  This program enhances the REACH (Remote Evaluation of Acute Ischemic Stroke) telemedicine system to attain earlier identification and management of young and rural patients with hypertension. It is designed to reduce stroke by increasing awareness of stroke in the region, use novel methods for prevention and treatment, and develop community based services. The focus is on education, novel use of REACH Telemedicine, and to target stroke related areas of disparity. REACH Telemedicine has been established in ten SC hospitals. The REACH cart is used in primary care clinics for high risk stroke patients. (Robert Adams, MD, Professor of Neurology; Director of the South Carolina Center of Economic Excellence; Director of MUSC Stroke Center)

  Sabra's Notes: Presentation stressed the importance of baseline measures, getting community residents in high risk communities screened early and working collaboratively with each other on SE VIEW community-based programs with community engagement expertise.

- **Tele-Critical Care Program to Reduce Rural Health Disparities (CREST)**
  This is a research project that combines telemedicine technology with provider education and selectively targets two specific conditions: sepsis and trauma. The specific research piece focuses on the Interstate-95 corridor and involves the process (feasibility), clinical expertise, and economic implications. (Dee Ford, MD, Assistant Professor of Pulmonary and Critical Care Medicine)
- **SC TeleSupoort: Diabetes Management Initiative**
  This program is designed to develop a practical and sustainable system of diabetes management in indigent patients in Charleston and neighboring counties. Emphasis is on home/self care with a focus on four key areas: medication adherence, self glucose monitoring, diet, and physical activity. Glucose is monitored by the patient with a device (the FORA System) that uploads to a central server. A nurse case manager reviews the information and provides necessary therapy and medication for the patient (with the approval of a physician). The device also monitors blood pressure. The purpose is to improve patient adherence with prescribed therapy. (Leonard Egede, MD, MS, Professor of Internal Medicine; Director of the Center for Health Disparities Research)
- **Telemedicine in the Evaluation of Alz heimer's Disease in a Rural, African American Population**
  The specific aims of this program are to validate the use of telemedicine to evaluate African American patients suffering from Alzheimer 's disease in SC using a previously identified cohort of subjects that are now being followed in remote sites across SC and to add two new sites to recruit subject using telemedicine. The intent is to broaden diagnosis and treatment services within the clinical practice and provide in home diagnosis and treatment services through mobile communication technology. (Jacobo Mintzer, MD, Professor of Neurosciences)

- **Heart Health Initiative**
  This initiative is the preventative cardiology and weight management program of the Children's Heart Program of SC (CHP-SC). CHP-SC serves the complex health care needs of predominantly obese children and adolescents with cardiovascular risk factors such hypertension, pre-diabetes, and dyslipidemia. Families are taught how to improve lifestyle behaviors through a series of medical evaluations, one-on-one nutrition and behavioral counseling sessions, group education classes, and individual fitness sessions. This program is has developed a cookbook, "The Art of Healthy Cooking" for families to use. Staff also uses text messaging to communicate with the children.
  (Melissa Henshaw, MD, Associate Dean for Advocacy and Advancement; Assistant Professor of Pediatric Cardiology; Medical Director of Heart Health)

  Sabra's Notes: Patient feedback feature using twitter and facebook will be added.

- **Lean Team Initiative**
  The Lean Team is a partnership between MUSC's Adolescent Medicine and the Charleston County School District (CCSD). This initiative is a school and community based program designed to improve the health and fitness of children, families, and teachers in the CCSC. It includes individual assessment and counseling, social networking, classroom education, school wellness councils, web-based resources, and community activities. Exercise videos are available on the web-based resources that fulfill the physical activity requirements of the SC Student Health and Fitness Act. (Janice Key, MD, Professor and Director of Adolescent Medicine)

  Sabra's Notes: Exploring opportunities to integrate Lean Team curriculum with selected Charleston County School District ROTC programs and will pursue ways to incorporate lessons learned from USC/Ft. Jackson Sheppard work with schools in Columbia, SC.

- **The Health Empowerment Zone**
  This community coalition addresses healthy eating, active living and positive lifestyles through a partnership with the City of North Charleston and several organizations to develop programs that target health and wellness, poverty, and crime. The City of North Charleston has allocated land for recreational facilities, created fitness programs for city employees, and developed policies that address social violence, poverty and educational success. This coalition recruits the assistance of local leaders and policy makers to help implement programs. (Deborah Williamson, DHA, CNM, Associate Dean for Practice; Assistant Professor, College of Nursing)

- **Community Engaged Scholars Initiative**
  This program is an education and training initiative of the Center for Community Health Partnerships at MUSC. This program provides training, pilot funds, and mentorship for five teams to increase the capacity of academic-community partnerships to conduct research to improve the health of SC communities. (Jeannette Andrews, PhD, Associate Dean for Research and Evaluation; Associate Professor for the College of Nursing)

- **Mobile Outreach Van, Educational, and Navigational Health Services for Underserved Populations (MOVENUP Initiative)**
  This initiative addresses the major public health problem of cancer in SC. It is designed to provide mobile health unit and patient navigation services, provide cancer education, nutrition and physical activity education to the I-95 Corridor counties. It also provides needed screening services and follow-up care and training via outreach and service delivery. (Marvella Ford, PhD, Associate Professor Bioinformatics and Epidemiology; Associate Director of Cancer Disparities, Hollings Cancer Center)

- **Healthy People in Healthy Communities/Good Health Across the Lifespan**
  The goal of this program is to leverage a limited-term health investment into long-term dividends in military readiness and community health. The strategy is to use community-based participatory research. Key community stakeholders include schools, worksites, churches, and the healthcare system. This program has fostered the development of the DASH Cookbook, by Jeanette Jordan. (Brent Egan, MD, Professor, Medicine and Pharmacology; Director, Hypertension Section of the Division of General Internal Medicine)

SE VIEW Action Agreements for Co-Investigators

- Inform Jeffrey Stephenson, USAMRMC ORT Regulatory Compliance Specialist, of those who have received institutional IRB approval
- Quarterly reports must be submitted to USAMRMC ORT no later than September 30, 2010. **Co-Investigators must submit quarterly reports to Dr. Slaughter and Tracey W. Smith by September 24, 2010**
- SE VIEW meeting should take place on a monthly basis for the next 3-6 months. Co-Investigators will provide a set of available dates.
- Provide existing evaluation plans and tools for Jennifer Friday
- Create a listserv for SE VIEW that will foster communication amongst the Co-Investigators
- Provide Dr. Slaughter with feedback regarding the brief program descriptions that were included in the SE VIEW objectives
- Product Line Review (PLR) should be submitted approximately 22 months into operation

Appendix 2

Southeastern Virtual Institute for Health Equity and Wellness
SE VIEW
Thursday, November 4, 2010
Meeting Minutes

Attendance Report

SE VIEW Core Administrative Team Present: Sabra Slaughter, PhD, Jennifer Friday, PhD, Tracey W. Smith, MHA

Co-Investigators Present: David Rivers, MA, Robert Adams, MD, Melissa Henshaw, MD, Jacobo Mintzer, MD, Laura Langston (for Dee Ford, MD), Joni Strom (for Leonard Egede, MD, MS), Jan Key, MD, Jeannette Andrews, PhD, Deborah Williamson, DHA, CNM, Marvella Ford, PhD, and Brent Egan, MD

Guests Present: Melissa Cox, Jennifer Moore, Lynn Brown, Andrea Boan, Jordan Magarik, Jessica Peterson, Ellen Debenham, Ed Jauch, Debbie Bryant, and Abby Kazley

Opening Remarks from Dr. Sabra Slaughter

Dr. Sabra Slaughter offered greetings and thanked everyone for their attendance. He requested the guests to introduce themselves then provided a quick overview of the meeting agenda. He opened discussion by inviting each Co-Investigator to update the group with program highlights. Each co-investigator briefly shared special moments or "wins" they have experienced with their programs since the September 2010 meeting.

SE VIEW Evaluation Plans

Dr. Jennifer Friday, SE VIEW Evaluation Consultant, presented information regarding SE VIEW evaluation plans to include the purpose of the evaluation and tracking core, the consultant's role, a brief summary of the existing SE VIEW evaluation plans and how each individual program fits into the overall goals and objectives of SE VIEW through the use of the Logic Model.

The purpose of the evaluation and tracking core is to develop an evaluation plan and framework for SE VIEW, identify key success indicators and measures for each program, work with co-investigators to utilize evaluation data and focus on the use of quality improvement methods to achieve evaluation goals.

Dr. Friday will ensure that the evaluation and tracking component of SE VIEW is in place and assess the congruence of each program goal with the SE VIEW goals and objectives. The following outlines how each program represents Goal B of SE VIEW:

- SE VIEW Goal B: Develop strategic partnerships and programs to address the burden of health disparities
  - Objective B1: Establish an educational program to reduce health disparities
    - MUSC public Information and Community Outreach (PICO) Initiative
    - Community Institutes for Traditional and Nontraditional Leaders
  - Objective B2: Establish a preventive medicine, health and wellness program to reduce health disparities
    - Stroke and Stroke Risk Initiative
    - Preventive Cardiology Research Center
    - SC Tele-Support: Diabetes Management
    - Tele-Critical Care Program to Reduce Rural Health Disparities (CREST)

        - Telemedicine in the Evaluation of Alzheimer's Disease in Rural, African American Population
    - Objective B3: Establish a community partnership and outreach program to reduce health disparities
        - The Lean Team Initiative
        - Community Engages Scholars
        - The Health Empowerment Zone
        - Promoting Good Health in Williamsburg County Across the Lifespan
        - Mobile Outreach Van, Educational, and Navigational Health Services for Underserved Populations (MOVENUP)
        -

Please see the attached evaluation presentation and SE VIEW Logic Model that was presented by Dr. Friday. Dr. Friday recommended several actions:

- Outstanding evaluation plans should be submitted to Dr. Jennifer Friday by December 10, 2010
- Co-Investigators provide Dr. Friday the contact information of any existing program evaluators in order to foster communication
- Review the SE VIEW Logic Model that was provided and use it as a template to develop individual program evaluation plans

Health Disparity Data

Dr. Sabra Slaughter presented definitions of health disparities that have been established by the South Carolina Department of Health and Environmental Control Office of Minority Health (SC DHEC: OMH). The purpose was to provide a common set of definitions that are designed to create a more uniform use of terms across the projects. The following lists the definitions that were presented:

- Health Disparities
- Health Equity
- Health Inequity
- Social Determinants of Health
- Six Targeted Disparity Areas
    - Heart Disease/Stroke
    - Cancer
        - Prostate Cancer
        - Breast Cancer
        - Colorectal Cancer
    - Infant Mortality
    - Diabetes
    - Immunizations
    - HIV/AIDS

Andrea Boan and Jordan Magarik presented health disparity data that compared the I-95 Corridor Counties, Coastal Carolina Counties and the remaining portions of SC. The data included 2009 ED and in-patient rates for conditions such as diabetes, hypertension, coronary heart disease, stroke and obesity.
Please see the attached health disparity definition report along with the health disparity data presentation.

SE VIEW Social Media

Tracey W. Smith announced that the SE VIEW website and Facebook page has been developed and is accessible. The purpose of the two media forms is to have relevant health disparity data and resources available to those who are seeking information and foster communication amongst the Co-Investigators and the community.

The SE VIEW website provides information about the SE VIEW project, each SE VIEW program, health disparity data, a list of the SE VIEW focus area by county, and a calendar of events.
The SE VIEW Facebook page allows co-investigators and members of the community to actively communicate health information, find links to pertinent wellness information, and access a calendar of upcoming health and wellness events (conferences, retreats, webinars, etc.) related to reducing health disparities.

SE VIEW Strategic Planning

1. **Action Agreements for Co-Investigators**
    - **a.** Outstanding **evaluation plans and tools should be submitted to Dr. Jennifer Friday by December 10, 2010**
    - **b.** Quarterly reports need to be submitted to USAMRMC ORT no later than December 30, 2010. **Co-Investigators must submit quarterly reports to Tracey W. Smith by December 23, 2010**
    - c. SE VIEW meeting will take place on a bi-monthly basis until further notice
    - d. Provide Tracey W. Smith feedback regarding the brief program descriptions that were included in the SE VIEW objectives
    - e. Co-Investigators will provide Tracey W. Smith with health resources to include on the SE VIEW website and Facebook
    - f. Co-Investigators will schedule a date for Tracey Smith and Dr. Slaughter to meet each project team
    - g. Co-Investigators will communicate any of their needs with any members of the SE VIEW core administrative team

2. **January 2011 Meeting**
    - a. January 13th, 20th, or 27th at 8:30 a.m. - 12:00 p.m.
    - b. Tracey W. Smith will send a doodle request to each co-investigator to determine the best date.

Appendix 3

Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW)
Executive Committee
Thursday, January 27, 2011
Meeting Minutes

Attendance Report

SE VIEW Core Administrative Team Present: Sabra Slaughter, PhD, Jennifer Friday, PhD, Thomas Gordon, PhD, and Tracey W. Smith, MHA

Co-Investigators Present: Marvella Ford, PhD, Melissa Henshaw, MD, Leonard Egede, MD, Janice Key, MD, Jacobo Mintzer, MD, David Rivers, MA, Brent Egan, MD, Dee Ford, MD, Melissa Cox, MPH (for Jeannette Andrews, PhD and Deborah Williams, DHA), and Lynn Brown (for Robert Adams, MD)

Guests Present: Wanda Jones, Rebekah Hardin, Sheryl Mack, Peggy Schachte, Coleen Martin, Jennifer Moore, Ted Blevins, Stacey Goretzka, David Azbill, and Bart Yancey

Opening Remarks from Dr. Sabra Slaughter

Dr. Sabra Slaughter offered greetings and thanked everyone for their attendance. He then introduced Mr. Charles E. Benton, Burke High School Principal.

Community Partnerships

Mr. Charles E. Benton welcomed everyone to Burke High School (BHS). He affirmed how proud he is of the BHS/MUSC partnership and acknowledged the value of the MUSC relationship to BHS in relation to the high school's goals. Mr. Benton also emphasized the positive influence that the Lean Team has on the students, faculty and staff through the promotion of healthy eating habits and regular exercise.

Coleen Martin, Lean Team Program Manager, and Jennifer Moore, Lean Team Nutritionist, provided an update on the status of the their project at BHS. They described how well the JROTC program has adopted the Lean Team's nutrition and fitness regimens and improved the use of their current curriculum. Mrs. Martin and Ms. Moore also shared information about their work with the BHS culinary arts program. They introduced Ms. Kia Frazier, Culinary Arts Instructor, and the culinary arts students. Mrs. Martin also announced that the students prepared the breakfast that was available for the meeting attendees.

SE VIEW Quarterly Reports and Program Highlights

Dr. Slaughter requested the co-investigators and guests to introduce themselves then provided a quick overview of the meeting agenda.

SE VIEW Quarterly Reports

Dr. Slaughter disclosed that the second quarter reports were well done and provided a brief summary of what each program has accomplished. He mentioned that some projects are collaborating and working well together. He also highlighted the work each program is doing to create and/or develop strategic partnerships within the community.

SE VIEW Program Highlights

Dr. Slaughter opened discussion by inviting each Co-Investigator to provide the group with program updates. Each co-investigator briefly shared challenging moments and/or necessary adjustments that took place with their programs since the November 2010 meeting.

SE VIEW Evaluation Plans

Dr. Jennifer Friday, SE VIEW Evaluation Consultant, provided a brief summary of the existing SE VIEW evaluation plans and Logic Models. She highlighted exemplary programs and reviewed the gaps and weaknesses in other projects.

Dr. Friday requested the Co-investigators to share specifics about what they need to help refine their evaluation plans and logic models. The consensus of the group was to rely on feedback from Dr. Friday. The Co-investigators agreed that expert input regarding evaluation would strengthen the reach and community impact of SE VIEW.

Dr. Friday recommended the following actions:

- Co-Investigators provide Dr. Friday the contact information of any existing program evaluators in order to foster communication
- Review the SE VIEW Logic Model that was provided and use it as a template to develop individual program evaluation plans
- Ensure that the evaluation plan language be consistent with that in the Logic Models
- Develop the plan to clearly illustrate the following:
    - Project goals and strategy for attainment
        - Consider comprehensive goals
    - Deliverables
    - Community impact

Regulatory Process

Dr. Slaughter initiated discussion regarding the SE VIEW regulatory process. Several examples were provided to clarify the regulatory process requirements of MUSC and USAMRMC ORT:

- Stacey Goreztka, IRB Program Manager, Ted Blevins, Grants and Contracts Administrator, and David Azbill, Assistant Director in the Office of Research and Special Programs, were present to answer questions regarding the MUSC IRB process and communicate the necessary requirements.
- Dr. Jeffrey Stephenson, USAMRMC ORT Regulatory Compliance Specialist, was available via conference call to answer questions and provide clarification on the broad steps of the second level review process requirements.
- Handouts were available for the Co-investigators that listed the necessary steps for securing second level approval as well as the minimum requirements for the submission packets.

SE VIEW Strategic Planning

- Dr. Thomas Gordon, SE VIEW Strategic Planning Consultant, discussed the importance of leadership and ways to empower the communities. He offered several suggestions:
    - Consider the skill sets and demographic profile of the population being served
    - Form healthy community partnerships and focus on teambuilding
    - Develop a cohesive, mixed race staff
    - Encourage discussions and collaborations between fellow co-investigators

- **Action Agreements for Co-Investigators**
    - **Co-Investigators must submit quarterly reports to Tracey W. Smith by March 23, 2011**
    - Provide Tracey W. Smith feedback regarding the brief program descriptions that were included in the SE VIEW objectives
    - Co-Investigators will provide Tracey W. Smith with health resources to include on the SE VIEW website and Facebook
    - Co-Investigators will schedule a date for Tracey Smith and Dr. Slaughter to meet each project team

- Co-Investigators will communicate any of their needs with members of the SE VIEW core administrative team

- **March 2011 Meeting**
  - Tracey W. Smith will send a doodle request to each co-investigator to determine the best date.

Appendix 4

Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW)
Executive Committee
Thursday, March 24, 2011
Meeting Minutes

Attendance Report

SE VIEW Core Administrative Team Present: Sabra Slaughter, PhD, Thomas Gordon, PhD, and Tracey W. Smith, MHA
Co-Investigators Present: Marvella Ford, PhD, Melissa Henshaw, MD, Joni Strom (for Leonard Egede, MD), Coleen Martin (for Janice Key, MD), Jacobo Mintzer, MD, David Rivers, MA, Kim Edwards (for Brent Egan, MD), Dee Ford, MD, Jeannette Andrews, PhD, Deborah Williamson, DHA, and Lynn Brown (for Robert Adams, MD)
Guests Present: Sam Hart, Wanda Jones, Rebekah Hardin, and Courtney O'Neill

Opening Remarks from Dr. Sabra Slaughter

Dr. Sabra Slaughter offered greetings and thanked everyone for their attendance. He then introduced Mr. Sam Hart, North Charleston City Council Member.

Community Partnerships

Mr. Sam Hart welcomed everyone to the Felix Pinckney Community Center. He thanked the co-investigators for their dedication to promoting health and wellness for children, adults and seniors in South Carolina. Mr. Hart also shared an enlightening historical context for the Liberty Hill Community and the Felix Pinckney Community Center.

Dr. Deborah Williamson, Health Empowerment Zone (HEZ) Co-Investigator, provided an update on the status of the project in North Charleston, SC. She explained how the HEZ program focuses on system and policy changes that benefit the community through the emphasis of 4 main areas:

- Environmental concerns
- Public transportation issues
- Access to healthy eating
- Mini grants

Dr. Williamson's presentation fostered productive exchange between the co-investigators and cultivated partnerships between projects. This brings substance to SE VIEW's goals of integrating model programs and developing strategic partnerships within the community.

SE VIEW Evaluation Plans

Dr. Sabra Slaughter reiterated the importance of the SE VIEW evaluation plans and that each co-investigator must submit their plans to Dr. Jennifer Friday, SE VIEW Evaluation Consultant, before the Year 1 Annual Report is complete.

Dr. Friday was available via conference call to answer any questions related to the evaluation plans. She mentioned that she would be contacting each co-investigator to speak with them directly regarding their individual evaluation plans.

Regulatory Process

Dr. Slaughter initiated discussion regarding the SE VIEW regulatory process. He requested the status of local IRB submission from each co-investigator that was present. Dr. Slaughter also explained the role of Dr. Jeffrey Stephenson, USAMRMC ORT Regulatory Compliance Specialist, with USAMRMC ORT and second level review procedures. He recommended the following actions:

- Engage the local IRB process at a minimum by the end of Year 1
- Utilize Dr. Stephenson's services for a smooth transition during the second level review process

Continuation Proposal (Phase II)

Tracey W. Smith, SE VIEW Program Manager, provided an update regarding the Continuation Proposal for Phase II of SE VIEW. She announced that the proposal was submitted through grants.gov on March 15, 2011. Mrs. Smith also mentioned that the proposal includes 6 additional programs. A summary of each of the proposed programs was provided for the co-investigators.

Budget Revisions

Tracey W. Smith opened discussion regarding the re-budgeting process for Year 2 of SE VIEW Phase I. Mrs. Smith focused on two subject areas:

- No Cost Extension
  - Request to carry-over money from Year 1 into Year 2 by April 1, 2011
  - Provide the amount, associated category and reason/justification for the remaining sum
- Re-budgeting for Year 2
  - Request to make minor budget adjustment or a shift in resources for Year 2 by May 14, 2011
  - Do not anticipate increases in funding for Year 2
  - Use the Re-budget Request Form provided to submit adjustments

SE VIEW Strategic Planning

- Dr. Thomas Gordon, SE VIEW Strategic Planning Consultant, reiterated the importance of leadership and ways to empower the communities.
- **Action Agreements for Co-Investigators**
  - **Co-Investigators must submit the following reports/requests to Tracey W. Smith:**
    - No Cost Extension request: Due April 1, 2011
    - Re-budget request: Due May 14, 2011
    - Annual Report: Due June 16, 2011
  - Provide Tracey W. Smith feedback regarding the brief program descriptions that were included in the SE VIEW objectives
  - Co-Investigators will provide Tracey W. Smith with health resources to include on the SE VIEW website and Facebook
  - Co-Investigators will schedule a date for Tracey Smith and Dr. Slaughter to meet each project team
  - Co-Investigators will communicate any of their needs with members of the SE VIEW core administrative team

- **May 2011 Meeting**
  - Tracey W. Smith will send a doodle request to each co-investigator to determine the best date.

Appendix 5

Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW)
Executive Committee
Thursday, June 2, 2011
Meeting Minutes

Attendance Report

SE VIEW Core Administrative Team Present: Sabra Slaughter, PhD, Thomas Gordon, PhD, Jennifer Friday, PhD, Tracey W. Smith, MHA, and Bart Yancey, MPA

Co-Investigators Present: Melissa Henshaw, MD, Leonard Egede, MD, Janice Key, MD, David Rivers, MA, Jeannette Andrews, PhD, Deborah Williamson, DHA, Robert Adams, MD, and Dan Lackland, DRPH

Guests Present: Peggy Schachte, Courtney O'Neill (for Jacobo Mintzer, MD), Debbie Bryant, DNP, RN (for Marvella Ford, PhD), Kim Edwards (for Brent Egan), Sheryl Mack (for Brent Egan, MD), Wanda Jones, Laura Langston (for Dee Ford, MD), Jane Zapp, PhD (for Dee Ford, MD), Jennifer Moore, Coleen Martin, Sharon Wolf, Melissa Cox, Lynn Brown, Ellen Debenham, and Joni Strom, MD

Opening Remarks from Dr. Sabra Slaughter

Dr. Sabra Slaughter offered greetings and thanked everyone for their attendance. He requested the group to introduce themselves then provided a quick overview of the meeting agenda.

Footprints - High Impact and Value

Dr. Slaughter opened discussion by inviting each co-investigator to update the group with program highlights focused on occurrences that demonstrate value and impact in the community served. Each co-investigator briefly shared how their project is progressing and their project status with the regulatory process. The exercise fostered productive exchange between the co-investigators and cultivated collaboration between projects. This brings substance to SE VIEW's goals of integrating model programs and developing strategic partnerships within the community.

SE VIEW Evaluation Plans

Dr. Jennifer Friday, SE VIEW Evaluation Consultant, requested the co-investigators to submit any outstanding evaluation plans and/or revisions. She reiterated the importance of the SE VIEW evaluation plans and the need to include it in the upcoming annual report that is due by June 16, 2011. Dr. Friday mentioned that she is available to answer any questions related to the evaluation process.

Budget Issues

Tracey W. Smith opened discussion regarding the following requests: 1) no cost extension (carry-over money from Year 1 into Year 2); 2)re-budgeting (minor budget adjustments for Year 2). She mentioned that both requests are under review and an update will be provided soon.

Annual Report

Tracey W. Smith answered questions regarding the annual report and reminded the group that the report must be submitted by June 16, 2011.

FOIA Request

Dr. Slaughter provided a brief synopsis of the FOIA request made by Renee Dudley, Post and Courier reporter. He requested that the group contact the MUSC Public Relations Department or any member of SEVAC if they receive any inquiries from Ms. Dudley.

SE VIEW Strategic Planning

- A strategic coaching session was held at 1:30 p.m. and led by Dr. Thomas Gordon, SE VIEW Strategic Planning Consultant. The purpose of the session was to review the following:
  - Sustainability (community partnering and capacity building)
  - Research and Service Design (impact and quality of your program; evidence for it)
  - Team/Staff Synergy
- **Action Agreements for Co-Investigators**
  - **Co-Investigators must submit the following reports/requests to Tracey W. Smith:**
    - Annual Report: Due June 16, 2011
  - Provide Tracey W. Smith feedback regarding the brief program descriptions that were included in the SE VIEW objectives
  - Co-Investigators will provide Tracey W. Smith with health resources to include on the SE VIEW website and Facebook
  - Co-Investigators will schedule a date for Tracey Smith and Dr. Slaughter to meet each project team
  - Co-Investigators will communicate any of their needs with members of the SE VIEW core administrative team

- **August 2011 Meeting**
  - Tracey W. Smith will send a doodle request to each co-investigator to determine the best date.

Appendix 6

Evaluation Results from
Completed Participant Surveys from the
Johns Island Community Leaders Institute

Johns Island Community Leaders Institute

Location: **Wesley United Methodist Church Life Center**
Fellowship Hall
2718 River Road
Johns Island, SC 29457

Date(s): **October 15-16, 2010**

Attendance: **133**

Johns Island Community Leaders Institute
Post-Evaluation
October 16, 2010

A. Content:

	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5

B. Speaker Evaluation:

1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

3. What would you change or add to the presentation? _____

_____

4. Additional Comments: _____

_____

_____

A. Content

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The session's content met my expectation.	28	4			
The session provided information and skills to make a difference in my life.	29	3			
The length of the session was appropriate.	24	8			
The amount of time allowed for discussion was satisfactory.	22	10			
Handouts were appropriate and helpful.	24	7	1		
Visual aids were effective.	20	9	3		

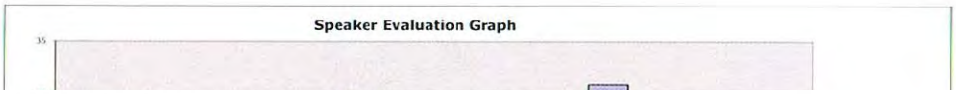
B. Speaker Evaluation

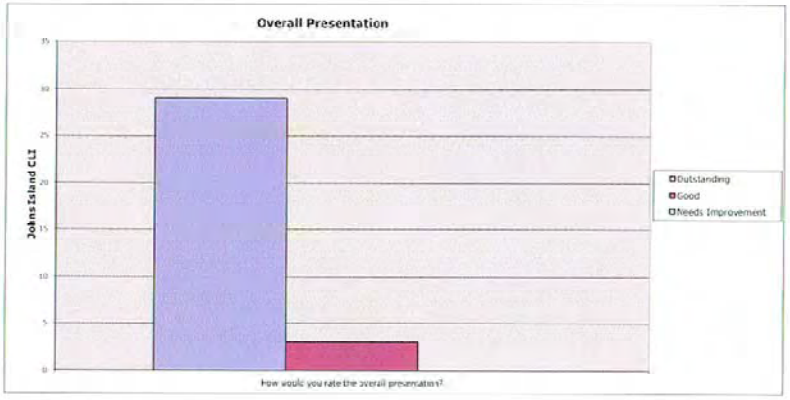
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.	29	3			
The speaker(s) presented the content in a clear understandable fashion.	30	2			
The speaker(s) presentation was helpful to my learning.	31	1			

C. Overall Presentation Remarks

	Outstanding	Good	Needs Improvement
How would you rate the overall presentation?	29	3	

What did you like the most?	Presenters spoke on their personal experiences related to their presentations. The information was very informative. I like the new information that was presented. Congressman Clyburn. Dr. Bell, "Closing the Gap in Health Care." Excellent presentation from Dr. LaRoche. Information most needed and the way it was presented. Entire conference was great. The Health Disparities/Health Issues was a great session. 10 20 30 Legislation by Congressman Clyburn. The information. The variety of local speakers. The presentation from Congressman Clyburn on how to obtain funds and services for our area. The helpful information. Information given by Congressman Clyburn. The content of the material. I enjoyed and learned something for each session.
What would you change or add to the presentation?	In the youth session, have a panel of youth to state their concerns. Have more forums in the community. Nothing. More time allowed for questions. More information on how to develop programs for our youth. Nothing. Time frame. All questions were answered. The diversity in subject manner, but it would be beneficial to spend a day of half day on each subject. Change the time form 5pm to 6pm. I would not change anything. Timing. Just try to get more people to the information. The number of presenters compacted in a short time span. Employment for retired people looking or needing additional income.
Additional Comments:	A good informative seminar. What is keeping Johns Island from becoming a town? Loved it! Establish focus groups in churches/community etc. Very great conference we needed this. Very informative. Enjoyed the institute and looking forward to the next. All the information really helped a lot. Providing this format at least come to the area counties twice a year. We need more of these fourums. I appreciate it. thank you. Continue to keep us informed and involved. Very good program. Praying that this is just the beginning of whats to come to the Island Community. The food was excellent. I think the overall program was excellent. The planners for this did a great job.I hope this will happen again. We need more of these types of workshops in/on the island areas in Charleston county. This was very informative and needs to be held more often. Thank you for this program and the opportunity to participate. It was a pleasure talking to Dr. Brent Egan after the session. He gave me insight. It was very resourceful, and I felt honored meeting the distinguished guests. I know that the information will be put to good use.


Speaker Evaluation Graph
35


Overall Presentation
35
30
25
20
15
10
5
0
Johns Island CLT
Outstanding
Good
Needs Improvement
How would you rate the overall presentation?

Appendix 7

Evaluation Results from
Completed Participant Surveys from the
Tougaloo College Community Leaders Institute (CLI)

Tougaloo CLI

Location: **Tougaloo College**
Holmes Hall Auditorium
500 West County Line Road
Tougaloo, MS 39174

Date(s): **August 20-21, 2010**

Attendance: **114**

Tougaloo College Community Leaders Institute
Post-Evaluation
August 21, 2010

A. Content:

	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5

B. Speaker Evaluation:

1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

3. What would you change or add to the presentation? _____

_____

4. Additional Comments: _____

_____

_____

A. Content

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The session's content met my expectation.	21	7	2	1	
The session provided information and skills to make a difference in my life.	18	9	2		2
The length of the session was appropriate.	15	8	7	1	
The amount of time allowed for discussion was satisfactory.	12	10	8	1	
Handouts were appropriate and helpful.	16	7	6	2	
Visual aids were effective.	15	10	4	2	

B. Speaker Evaluation

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.	25	5		1	
The speaker(s) presented the content in a clear understandable fashion.	22	8		1	
The speaker(s) presentation was helpful to my learning.	19	10	1	1	

C. Overall Presentation Remarks

	Outstanding	Good	Needs Improvement
How would you rate the overall presentation?	16	13	

What did you like the most?

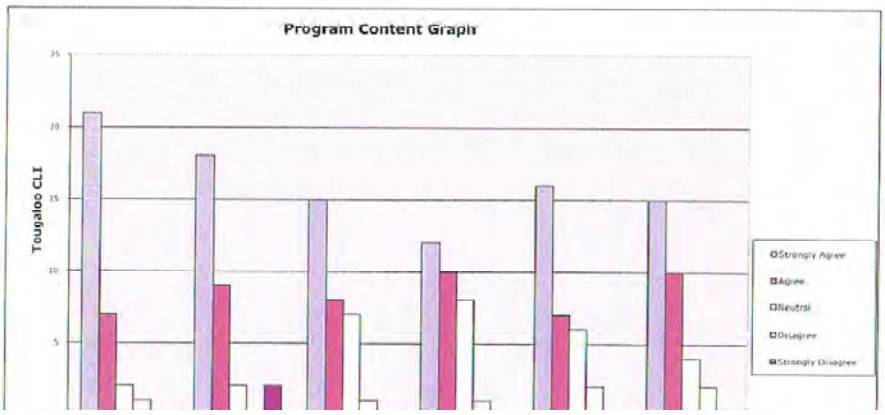
The diversity of topic perspectives.
The youth issue/ challenge session.
Dr. Warren Jone's Presentation on Health Disparities.
The well prepared message of each speaker on their topic.
Ms. Jordan's presentation. Session III on Health issues, and the luncheon.
I liked the panelist and delivery of their presentations and topics.
The continuity of the speakers. Each were honest, concerned, and solution oriented.
Loved it ALL!
All of the presentations and the format.
Partnership is very vital and key to substainable communities.
Being present and in the mix.
The Saturday morning session on Health Disparities.
Dr. John Perkin's passion and simple/clear solutions.
Knowledgeable speakers presenting innovative ways to progress.
The presentations were very informative.
High level of experience.

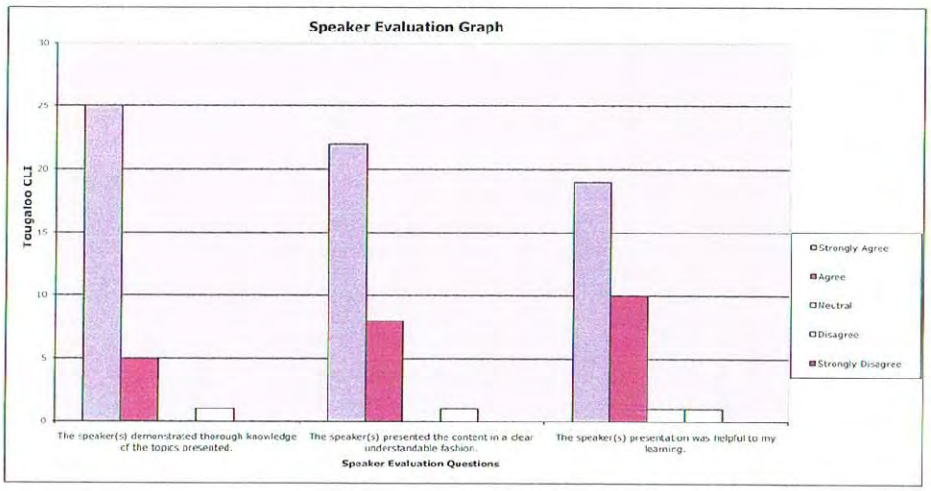
What would you change or add to the presentation?

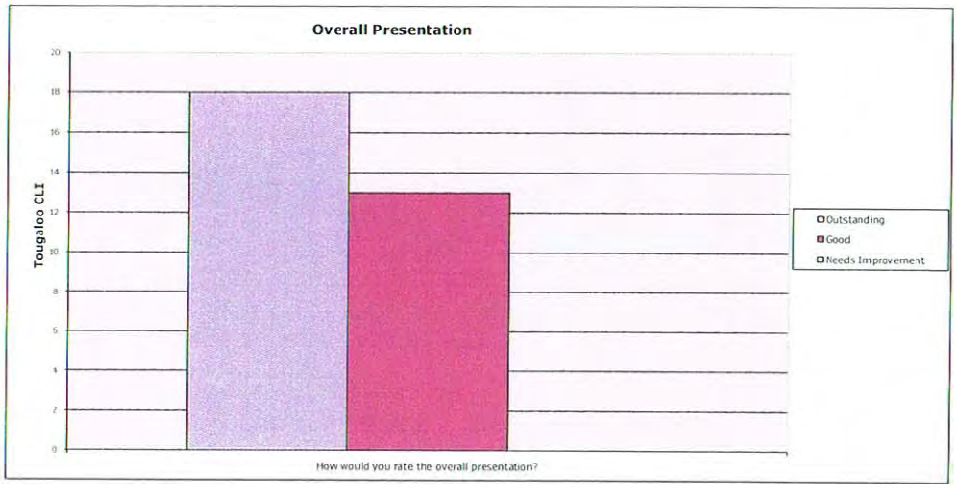
Reduce the number of speakers and increase speaker time.
Nothing.
Add a second screen for the pannelists to view information as it is being presented.
Nothing.
Health panel was awesome. Have state agency MDEQ &MSDH at the table with federal agency.
Typicaly events like this have no real follow up all talk.
There was too much content on presentations, more discussion would have been beneficial.
Fewer speakers.
Fewer speakers and more Q and A.
Time.
Speakers g ve more of a general overview and more time for Q&A with a box for general questions.
Fewer presenters.
Reduce the number of speakers and increase speaker time.
Methods of getting ideas achieved.
The session for economic development was a bit too long.
A more racially diverse audience. Kellog Foundation should be added.

Additional Comments:

I believe our speakers could be a culture mixture.
Great Job.
This was an outstanding Leaders Institute. We look forward to follow up.
Next year, I look forward to more people in the audience. Get the word out.
A great institute!
Partner with MDEQ for recycling and Great Conference.
We need true business investment in the re-building of this community, enough talk.
This was a good conference with some high quality presentations.
More audience participation and/or sharing.
Very weill done, much needed information.
Keep listeners interest and speakers could challenge audience for involvement.
Good content, well presented, and good food.
Very informative.
When and what is the follow up?
Healthier food choice.
Less speakers, and more time spent on topics.
Thanks to Tougaloo for organizing and hosting this institute.


Program Content Graph
Tougaloo CLI
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Speaker Evaluation Graph
Tougaloo CLI
0
5
10
15
20
25
30
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.
The speaker(s) presented the content in a clear understandable fashion.
The speaker(s) presentation was helpful to my learning.
Speaker Evaluation Questions


Overall Presentation
Tougaloo CLI
20
18
16
14
12
10
8
6
4
2
0
How would you rate the overall presentation?
Outstanding
Good
Needs Improvement

Appendix 8

Evaluation Results from
Completed Participant Surveys from the
Augusta Technical Assistance Workshop

Augusta Technical Assistance Workshop

Location: **Paine College**
Candler Memorial Library
1235 Fifteenth Street
Augusta, GA 30901

Date(s): **August 28, 2010**

Attendance: **45**

Augusta Technical Assistance Workshop
Post-Evaluation
August 28, 2010

A. Content:

	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5

B. Speaker Evaluation:

1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

3. What would you change or add to the presentation? _____

_____

4. Additional Comments: _____

_____

_____

A. Content

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The session's content met my expectation.	28	8	1	1	
The session provided information and skills to make a difference in my life.	24	11	2		1
The length of the session was appropriate.	19	9	6	3	1
The amount of time allowed for discussion was satisfactory.	19	14	4	1	
Handouts were appropriate and helpful.	29	7	1	1	
Visual aids were effective.	28	7	2	1	

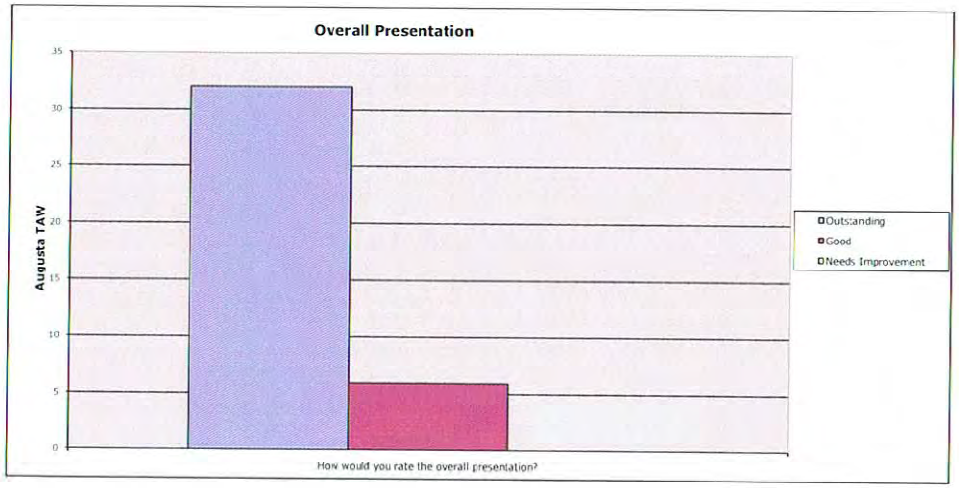
B. Speaker Evaluation

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.	34	3			1
The speaker(s) presented the content in a clear understandable fashion.	35	2			1
The speaker(s) presentation was helpful to my learning.	34	1	2		1

C. Overall Presentation Remarks

	Outstanding	Good	Needs Improvement
How would you rate the overall presentation?	32	6	

What did you like the most?	The process in applying for grants. The helpful information about grants. The helpful information about grants. The examples given relatable to experience. Information. The entire workshop. The presentation of the 501(C)3. The role playing of how reviewers evaluate proposals. Interactiveness. Discussion. The through knowledge of the information, organization, and communication. The interactivity of the sessions and relevance of the information. The amount of time and detailed information presented on grant proposals. Real life experiences. The candid approach form each presenter. Sessions II and III. Opening skit on reviewers. The brevity of persenting such complex information. Information, Q&A sessions, speakers were informative and knowledgeable. The flow to guide. Very informative. Details provided. The wealth of knowledge.
What would you change or add to the presentation?	Consider team breakouts to come up with budget development. Nothing. Demand that all questions be addressed at the end of presentations and not during. Group participation in creating senarios. Presentations were highly informative. Add more workshops. More interaction and less dialogue. Add prayer. Nothing. Larger room with tables for writing. Allow more time for Q&A so that presenters don't have to rush to provide information. Additional Q&A time. Add more time. It's great the way it is.
Additional Comments:	This program is very helpful and useful in community development. It was excellent! Very interesting, glad I was able to attend. Information was very helpful, detailed, knowledge was displayed, and professional. Tables to write notes during presentations. I'm glad I attended. Truly enjoyed workshop, learned valuable information and met interesting people. Entire workshop was very good. Stay on task and on time, helpful websites, and major foundations. I enjoyed it! Great and much needed. Environment was nice for learning. Everything was very informative. Good and helpful information. Follow up on attendees and how information has benefited them. More time for questions, but information was great. Good knowledge content and clarity. Thank you!


Overall Presentation
35
30
25
20
15
10
5
0
Augusta TAW
Outstanding
Good
Needs Improvement
How would you rate the overall presentation?

Evaluation Results from
Completed Participant Surveys from the
Burke County Technical Assistance Workshop

Burke County Technical Assistance Workshop

Location: **Augusta Technical College-Waynesboro/Burke Campus**
Auditorium
216 Highway 24 South
Waynesboro, GA 30830

Date: **December 4, 2010**

Attendance: **37 attendees**
47 including staff and panelists

Appendix 9

Burke County Technical Assistance Workshop
Post-Evaluation
December 4, 2010

A. Content:	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5
B. Speaker Evaluation:					
1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

3. What would you change or add to the presentation? _____

_____

4. Additional Comments: _____

_____

_____

A. Content

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The session's content met my expectation.	29	3			
The session provided information and skills to make a difference in my life.	26	6			
The length of the session was appropriate.	25	7			
The amount of time allowed for discussion was satisfactory.	25	7			
Handouts were appropriate and helpful.	28	4			
Visual aids were effective.	28	4			

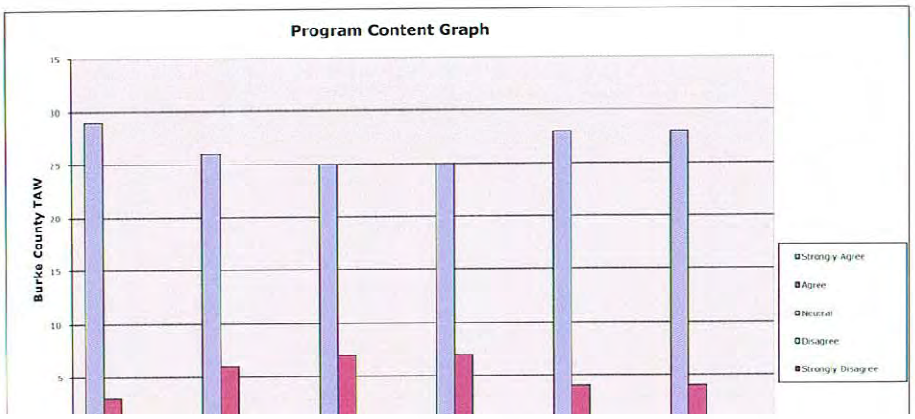
B. Speaker Evaluation

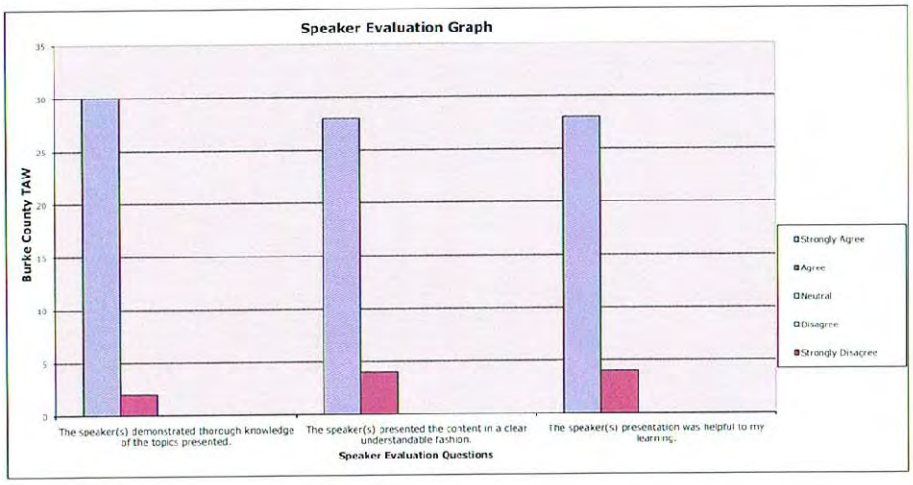
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.	30	2			
The speaker(s) presented the content in a clear understandable fashion.	28	4			
The speaker(s) presentation was helpful to my learning.	28	4			

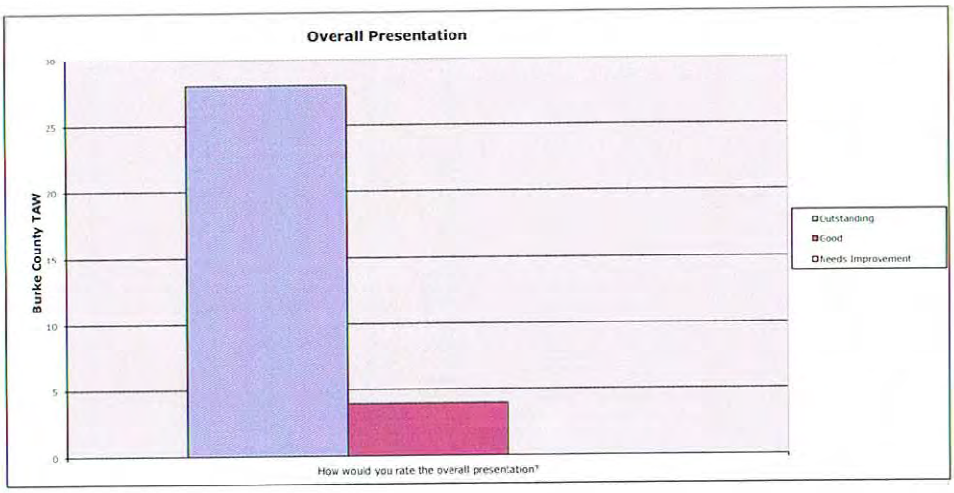
C. Overall Presentation Remarks

	Outstanding	Good	Needs Improvement
How would you rate the overall presentation?	28	4	

What did you like the most?	Well organized and met a variety of needs. Speakers and skit. The speakers made you want to know more. Questions and Answers. How to write a grant. Non-threatening environment for exchange. Easy to understand and chart progression. The speakers were excellent and on point. Speakers Information were very helpful. Visual and oral presentations. I enjoyed everything. All speakers were informative. They answered "all" questions.
What would you change or add to the presentation?	Nothing. Offer workshop more often. Keep your breaks timely. Extend the length of presentations. More time. The inclusion of a grant that was successfully submitted and administered. Perhaps, place all attendees at circular tables and we can pass questions as a group to feed at the end of the sessions. More of the same workshops. Everything was good.
Additional Comments:	Thanks for the great information. Awesome resources and opportunities to give to others the information gained. Thank you! I wish it was done regularly in rural areas. Meals were excellent. Check microphones for batteries. Every speaker was excellent. I received more information than I expected. This is clearly the workshop I have attended, and I have been to plenty in r Great workshop. Thanks. Great. Enjoyed and it was very informative. I really enjoyed myself. The answers were clear. Tables were too spread out. We needed tables to write on. Speakers need to always use microphones because of different hearing abilities of the me These presentors were wonderful. I enjoyed it. I would like for the speakers to know that they were very helpful and we appreciate the information, best workshop I have attended so far. Very inspired by this workshop.


Program Content Graph
Burke County TAW
15
10
5
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Speaker Evaluation Graph
Burke County TAW
35
30
25
20
15
10
5
0
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.
The speaker(s) presented the content in a clear understandable fashion.
The speaker(s) presentation was helpful to my learning.
Speaker Evaluation Questions


Overall Presentation
Burke County TAW
30
25
20
15
10
5
0
How would you rate the overall presentation?
Outstanding
Good
Needs Improvement

Appendix 10

Evaluation Results from

New Ellenton/Jackson Community Leaders Institute.....Post-Evaluation 04/02/11

New Ellenton/Jackson Community Leaders Institute
Post-Evaluation
April 2, 2011

A. Content:

	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5

B. Speaker Evaluation:

1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

3. What would you change or add to the presentation? _____

_____

4. Additional Comments: _____

_____

_____

A. Content

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The session's content met my expectation.	18	4		1	
The session provided information and skills to make a difference in my life.	14	7	1	1	
The length of the session was appropriate.	15	7	1		
The amount of time allowed for discussion was satisfactory.	12	7	4		
Handouts were appropriate and helpful.	16	5	1	1	
Visual aids were effective.	17	5	1		

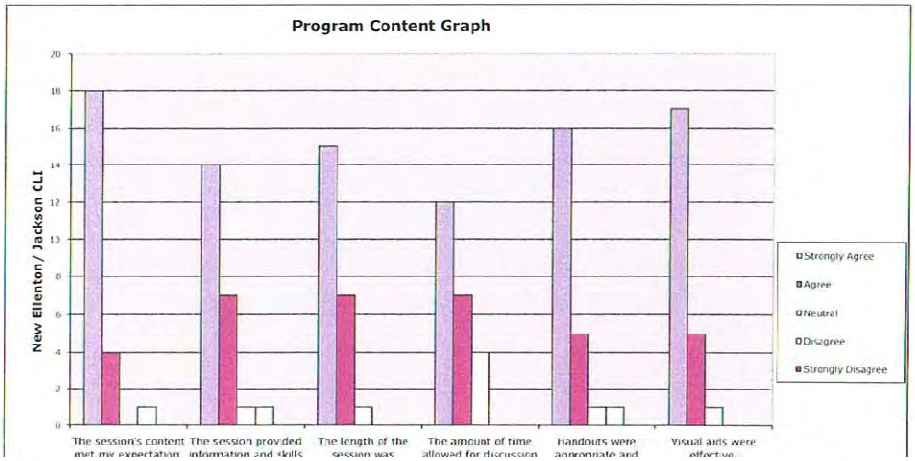
B. Speaker Evaluation

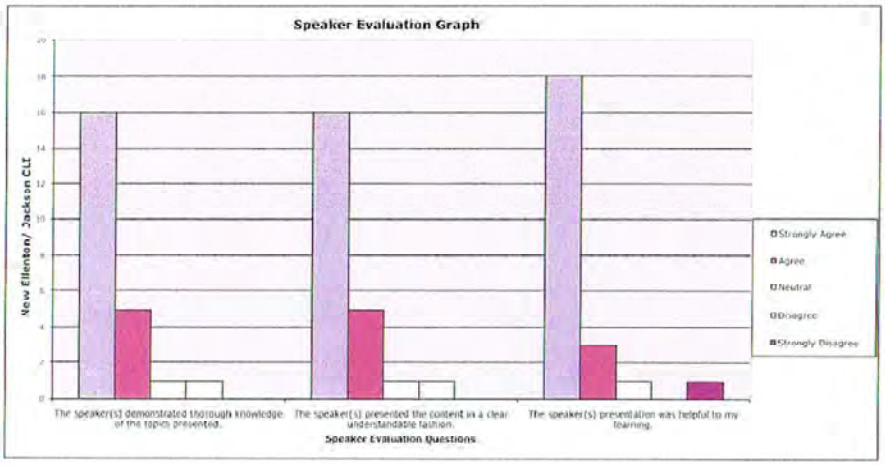
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The speaker(s) demonstrated thorough knowledge of the topics presented.	16	5	1	1	
The speaker(s) presented the content in a clear understandable fashion.	16	5	1	1	
The speaker(s) presentation was helpful to my learning.	18	3	1		1

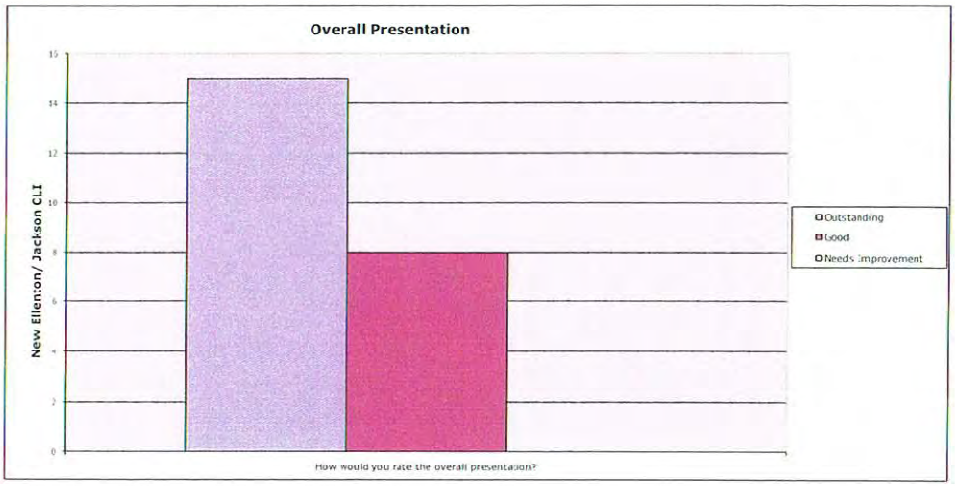
C. Overall Presentation Remarks

	Outstanding	Good	Needs Improvement
How would you rate the overall presentation?	15	8	

What did you like the most?	The Youth Programs. The Health Issues. The Health Issues. The speakers' knowledge of information. Everything. The Youth Session. The information and data presented. Presenters were excellent. The youth panel's issues, challenges, and information on grants. Very Informative. Good Information. Information on grants. The medical session.
What would you change or add to the presentation?	The length. Nothing. More visual aids; Some speakers could have been more effective on delivery of information. None. Maybe some break-out sessions. A grants workshop. Longer question and answer sessions. More time. More program/funding for youth and community development for future leaders in town, city, state. Smaller panels; Don't put the health panel last, some people left early but needed to hear the information. The panel or representation of clergy. Round-table break-out discussions.
Additional Comments:	Great program, well put together, and very informative. Blessings to all. Make this an annual event. Need to do this more often. Information was very helpful and educational. Very good seminar, but unfortunate that participation was low from area residents. Very impressed with Ms. Ashley Holtsizer's motivation and drive to succeed against the norm. Well done! We appreciate MUSC and hope they continue to bring community leaders together to provide resources that may be beneficial to residents. This should be an annual event to keep the surrounding area informed of who and what is going on in the areas of concern. I am grateful for the information and resources made available through this institute. I look forward to connecting with people and resources we were Thanks for sharing with us, all the information was valuable.


Program Content Graph
New Ellenton/ Jackson CLI
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Speaker Evaluation Graph
New Ellenton/ Jackson CLI
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Speaker Evaluation Questions


Overall Presentation
New Ellen:on/ Jackson CLI
15
14
12
10
8
6
4
2
0
Outstanding
Good
Needs Improvement
How would you rate the overall presentation?

Appendix 11

Evaluation Results from
Completed Participant Surveys from the
Florence Community Leaders Institute

Florence Community Leaders Institute

Location: **Francis Marion University**
Lowrimore Auditorium
4822 East Palmetto Street
Florence, SC 29506

Date: **May 20-21, 2011**

Attendance: **88 attendees**

Florence Community Leaders Institute
Post-Evaluation
May 21, 2011

A. Content:	Rating Scale				
	Strongly Agree		*Neutral*		*Strongly Disagree*
1. The session's content met my expectation.	1	2	3	4	5
2. The session provided information and skills to make a difference in my life.	1	2	3	4	5
3. The length of the session was appropriate.	1	2	3	4	5
4. The amount of time allowed for discussion was satisfactory.	1	2	3	4	5
5. Handouts were appropriate and helpful.	1	2	3	4	5
6. Visual aids were effective.	1	2	3	4	5
B. Speaker Evaluation:					
1. The speaker(s) demonstrated thorough knowledge of the topics presented.	1	2	3	4	5
2. The speaker(s) presented the content in a clear understandable fashion.	1	2	3	4	5
3. The speaker(s)' presentation was helpful to my learning.	1	2	3	4	5

C. Overall Presentation Remarks:

1. How would you rate the overall presentation? (Please circle)

Outstanding Good Needs Improvement

2. What did you like the most? _____

_____

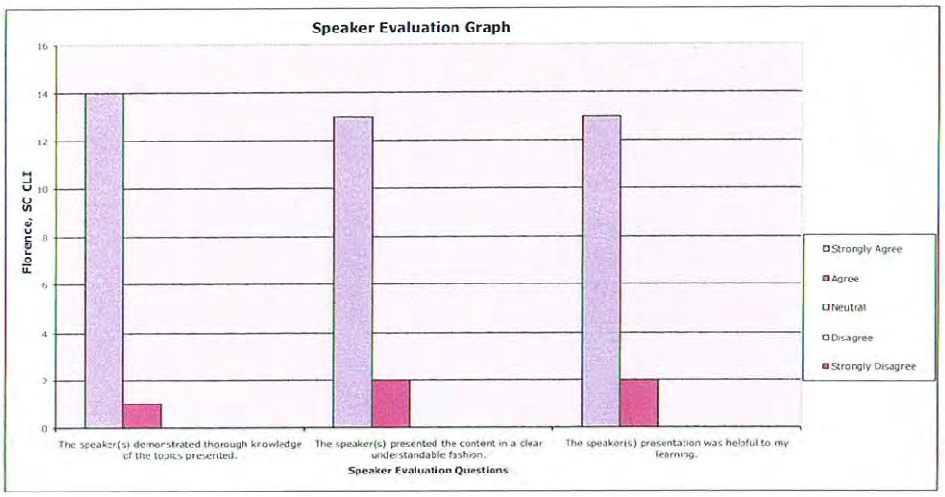
3. What would you change or add to the presentation? _____

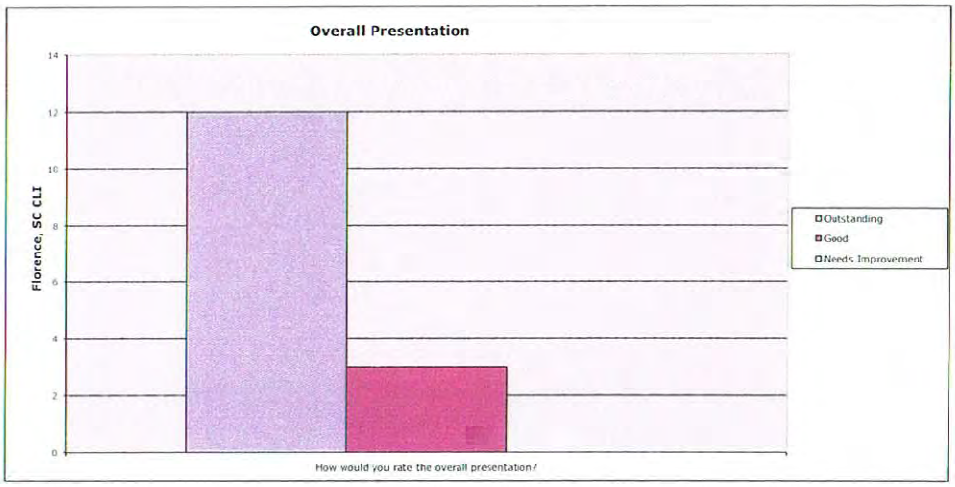
_____

4. Additional Comments: _____

_____

_____


Speaker Evaluation Graph
Florence, SC CLI
16
14
12
10
8
6
4
2
0
The speaker(s) demonstrated thorough knowledge of the topics presented.
The speaker(s) presented the content in a clear understandable fashion.
The speaker(s) presentation was helpful to my learning.
Speaker Evaluation Questions
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree


Overall Presentation
Florence, SC CLT
14
12
10
8
6
4
2
0
How would you rate the overall presentation?
Outstanding
Good
Needs Improvement

Appendix 12

South**e**astern **V**irtual
Institute for Health
Equity and **W**ellness (SE VIEW)

Stroke and Stroke Risk Reduction Initiative

Robert J Adams, MS, MD
Dan Lackland, DrPH

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Health Disparities

South Carolina and many other states in the southeast share a disproportionate burden of chronic maladies such as:

- Diabetes mellitus, Hypertension, Metabolic syndrome, Many types of cancer, Periodontal disease, Stroke and Cardiovascular Disease

The problem is compounded by the:

- Rural nature of these states
- Ethnic and socio-economic disparities that amplify the incidence, prevalence, and complications associated with these diagnoses

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Financial Implications

With escalating health care costs impacting federal, state, and employer budgets, the economic consequences of disparities could be a key driver to effecting change, improving the quality of care for many Americans, and ensuring a military-ready population.

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

SE VIEW

The Medical University of South Carolina (MUSC) proposes to address these burdens by establishing the **Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW)**.

The Southeastern VIEW's vision is to develop a nationally recognized multidisciplinary, inter-professional team of researchers, educators, outreach professionals and laypersons to eliminate health disparities.

Sabra C. Slaughter, PhD
Principal Investigator

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

SE VIEW Investigators

- Sabra Slaughter, PhD
- Robert J Adams, MS, MD
- Anthony Alberg, PhD, MPH
- Marvella Ford, PhD
- Melissa Henshaw, MD, MS, FAAP
- Marilyn Laken, PhD, RN, FAAN
- Jeannette Andrews, PhD, APRN-BC, FNP
- Deborah Williamson, DHA, RN, MSN, CNM
- Daniel Lackland, DrPH
- David Rivers, MA
- Dee Ford, MD
- Jacobo Mintzer, MD
- Brent Egan, MD
- Janice Key, MD
- Leonard Egede, MD, MS

Changing What's Possible.

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

SE VIEW: Telemedicine Programs

Stroke and Stroke Risk Reduction Initiative (SSRI)

- This program enhances the REACH (Remote Evaluation of Acute Ischemic Stroke) telemedicine system to attain earlier identification and management of young and rural patients with hypertension.
- The focus is on education, novel use of REACH Telemedicine, and to target stroke related areas of disparity.
  - REACH Telemedicine is established in 15 S.C. hospitals.
- **Robert Adams, MS, MD,** Professor of Neurology;
  Director of the South Carolina Center of Economic Excellence;
  Director of MUSC Stroke Center

Changing What's Possible.

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

SE VIEW: Telemedicine Programs

Stroke and Stroke Risk Reduction Initiative (SSRI)

- We have far too many strokes
- Too many young persons having stroke
- Too few patients being treated urgently for stroke
- Our telemedicine program is changing access to urgent and expert stroke care in a major way increasing tPA use 2.5 times

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Impact of REACH MUSC on Access: 2009

South Carolina African American Population		
Population (%) within Drive Time to JCAHO Primary Stroke Care or Web-Enabled REACH Site		
	30 Minutes	60 Minutes
Prior to REACH	641,922 (16%)	1,003,003 (25%)
After first 6 REACH Sites went live	1,163,483 (29%)	1,965,886 (49%)
Access Increase (%)	521,562 (13%)	962,883 (24%)

Changing What's Possible.

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

SE VIEW: Other Telemedicine Programs

- **Tele-Critical Care Program to Reduce Rural Health Disparities (CREST)**
  - **Dee Ford, MD**, Assistant Professor of Pulmonary and Critical Care Medicine
- **SC TeleSupport: Diabetes Management Initiative**
  - **Leonard Egede, MD, MS,** Professor of Internal Medicine; Director of the Center for Health Disparities Research
- **Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population**
  - **Jacobo Mintzer, MD**, Professor of Neurosciences

Changing What's Possible.

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

REACH MUSC

Tele-Stroke Network

Telemedicine allows remote facilities to communicate with the HUB at MUSC to access vascular neurologists specially trained in stroke treatment-including the

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY
of SOUTH CAROLINA

REACH MUSC

Tele-Stroke Consult

Consultant logs into the REACH secure website to access and control the REACH cart (mobile unit composed of a computer, LCD screen, and fully adjustable camera) to do the exam and NIHSS

Changing What's Possible.

MUSC
MEDICAL UNIVERSITY
of SOUTH CAROLINA

REACH MUSC

Tele-Stroke Consults

A robust "hub and spoke" system that

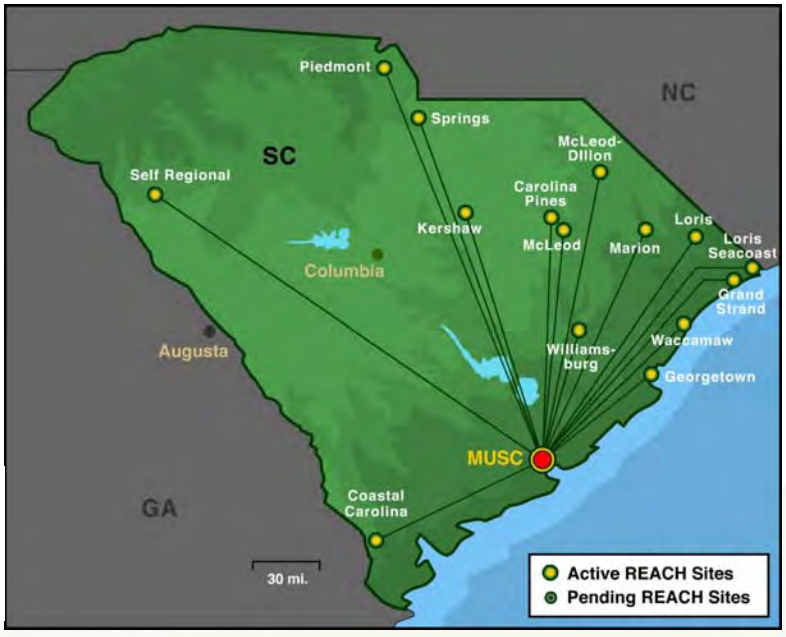
- Facilitates rapid assessment of stroke patients
- Increases use of tPA and other therapies
- Expedites late revascularization using intra-arterial re-canalization techniques
- Enhances confidence in the remote facility
- Enhances community stature of remote facility
- Creates MUSC-Remote site partnerships that carry over into other areas ("halo effect")

Changing What's Possible.

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

REACH MUSC

Tele-Stroke Network



MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

Stroke and Stroke Risk Reduction Initiative (SSRI)

Multifaceted team working to define and reduce health disparities in South Carolina

- Robert J Adams, MS, MD – Director MUSC Stroke Center
- Dan Lackland, DrPH – Epidemiologist
- Ed Jauch, MD – Emergency Medicine
- Lancer Scott, MD – Emergency Medicine
- Abby Kazley, PhD – Health Economist
- Ellen Debenham, RN, CCRC – Project Manager
- Andrea Boan, MS – Research Associate, Epidemiology
- Jennifer Garry, RN – Research Nurse
- Lynn Brown, MBA - Research Associate
- Jessica Peterson - Research Associate
- Corinne Hilbert - Research Associate
- Eunsil Yim, MS - Research Associate, Epidemiology
- Charles Ellis, Jr., PhD, CCC-SLP – Health Sciences, Disparities

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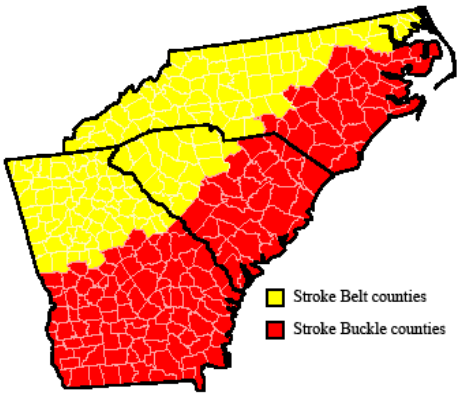
Stroke and Stroke Risk Reduction Initiative

South Carolina is the "buckle" of the Stroke Belt

- S.C. has stroke rates among the highest in the nation
- Strokes occurs more often in younger persons
  - Greater Healthcare Co
  - Lost Productivity
  - Reduced Military ready personnel



Eastern NC, SC & GA are part of the "Stroke Buckle."
All 3 states are part of the 8-12 state "Stroke Belt" region.

Changing What's Possible.

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Changing What's Possible.

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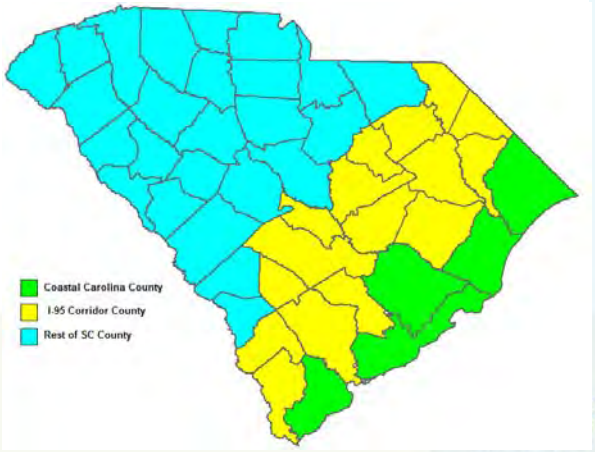
SSRI: Aim 1

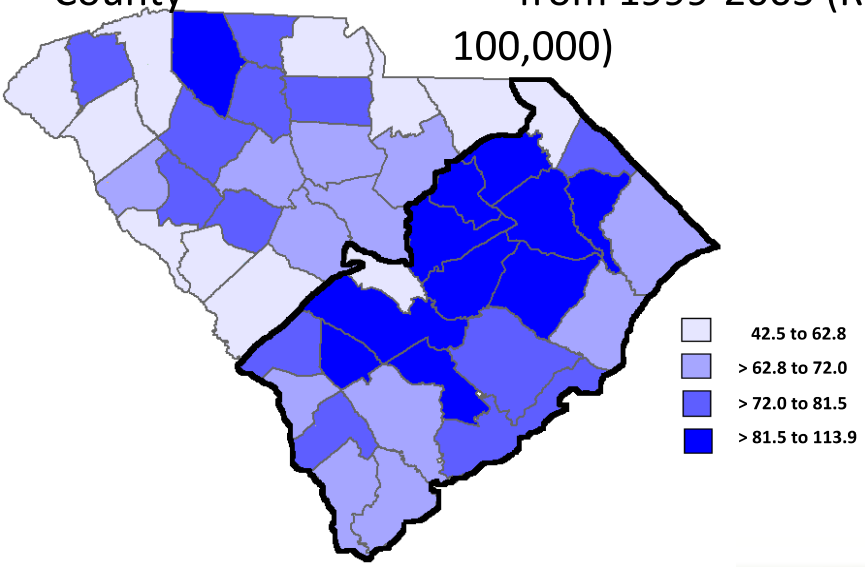
Define and characterize the primary regions of interest (ROI) (Boan, Lackland)

- Three Areas
  1. I -95 Corridor
  2. Coastal Region
  3. The rest of the state of S.C.



Changing What's Possible.

Age-Adjusted Mortality Rates for Stroke in SC by County from 1999-2005 (Rates per 100,000)



Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2005. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2005 Series 20 No. 2K, 2008. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Aug 8, 2008 4:27:26 PM

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SSRI: Aim 2

Benchmark regions with and without REACH and evaluate the impact of telemedicine with regard to:

a) Access to care
b) Awareness of stroke symptoms, appropriate response to stroke, attitudes regarding treatment
c) Time from onset of symptoms to Emergency Department
d) Use of Alteplase (tPA)

Aim 2a: Access To Care

1. Evaluate access to expert stroke care pre- and post- REACH implementation
   - 2000 and 2010 Census data with Geographic Information Systems (GIS) will be used to determine the number of residents who live within 30 & 60 minutes of a primary stroke center (PSC) or a REACH MUSC Telestroke site. (Kazley)

Aims 2b: Awareness of Symptoms, Response Times & Attitudes

1. All patients having had a REACH telestroke consult will be surveyed to obtain information related to their recognition and response to the symptoms which led to their REACH consult. (Kazley, Boan, Garry)

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Aims 2c: Time from Onset of Symptoms to Emergency Dept.

2. We will obtain EMS "run sheets" on all REACH patients that used EMS. (Jauch)

We will determine the:

- Fraction of patients who used 911
- Fraction of calls dispatched as a stroke
- The time interval from onset of symptoms to activation of 911

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Aim 2d: Use of Alteplase (tPA)

1. We will obtain two data sets from ORS to assess tPA use and impact of the REACH telestroke program (Kazley)

   We will assess the number of strokes and tPA use at:

   - REACH hospitals
   - Non-REACH hospitals

Changing What's Possible.

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Aim 3: Continuing Medical Education

CME Education (Lackland)

A. Provide targeted stroke and stroke prevention CME programs to health providers in the ROI
B. Identify gaps in knowledge, behavior & outcomes and design the programs specific to these needs
C. Administer the CME programs through the traditional CME venue of in person programs as well as utilizing distance learning technology
D. Create a bank of enduring stroke and stroke prevention education material that can be accessed electronically
E. The success of the CME will be will be evaluated by assessing changes in knowledge, behavior and outcomes

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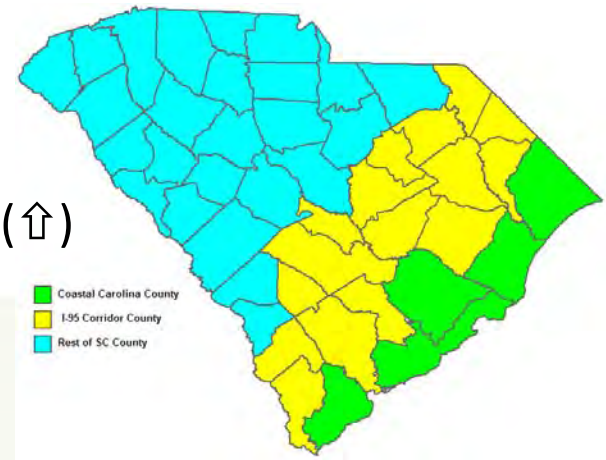
Epidemiology Core

- Maintain emergency room and hospital databases pertinent to SE View Projects
- Analyze the data by the 3 ROI
- Data will be provided to the SE VIEW cores as needed

SSRI: Future Aims

- Focus on I 95 corridor
- Design and carry out interventions to increase the knowledge and the response to stroke symptoms
- Monitor use of 911 (⇧) and onset-to-door times (⇩)

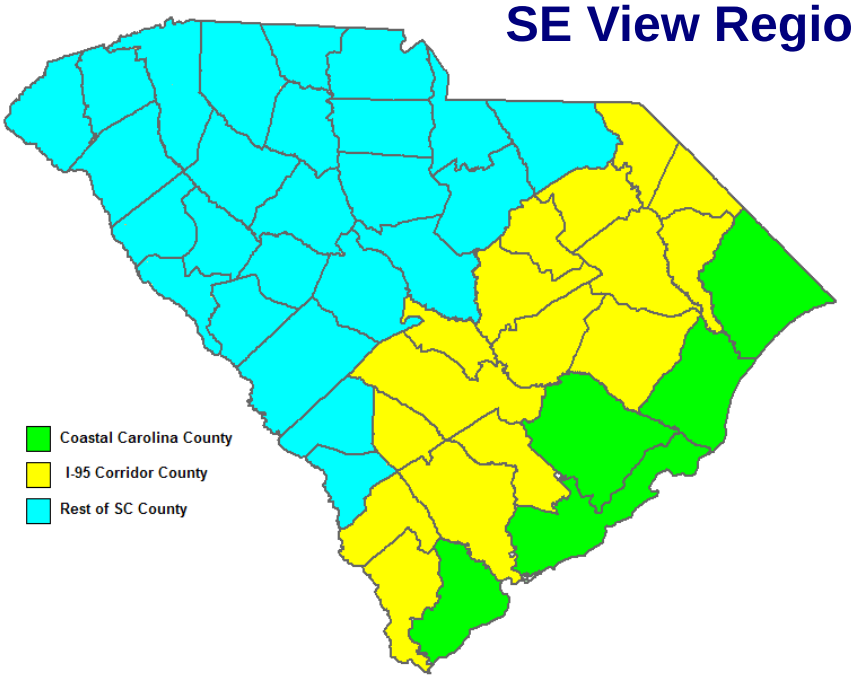


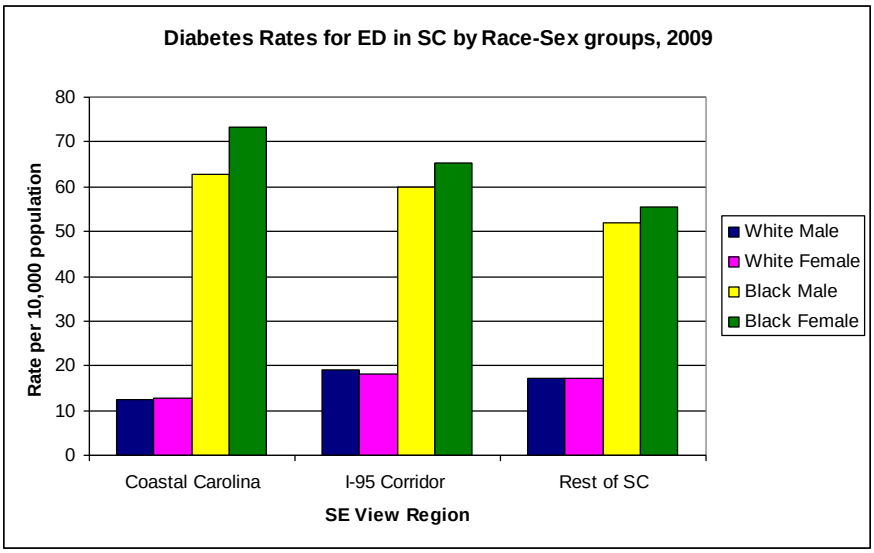
Changing What's Possible.

Appendix 13

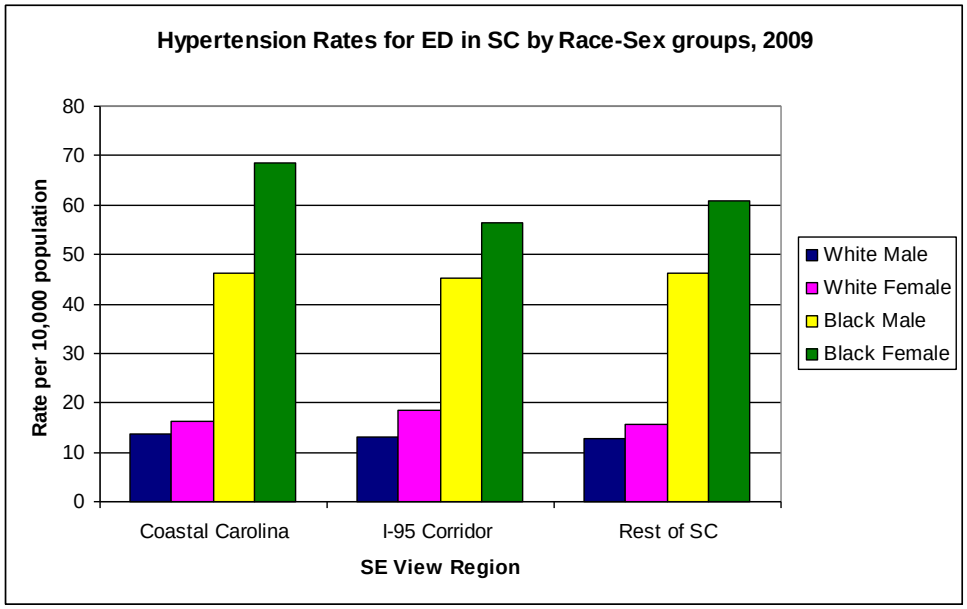
SE VIEW:
Health Disparities Data

SE View Regions

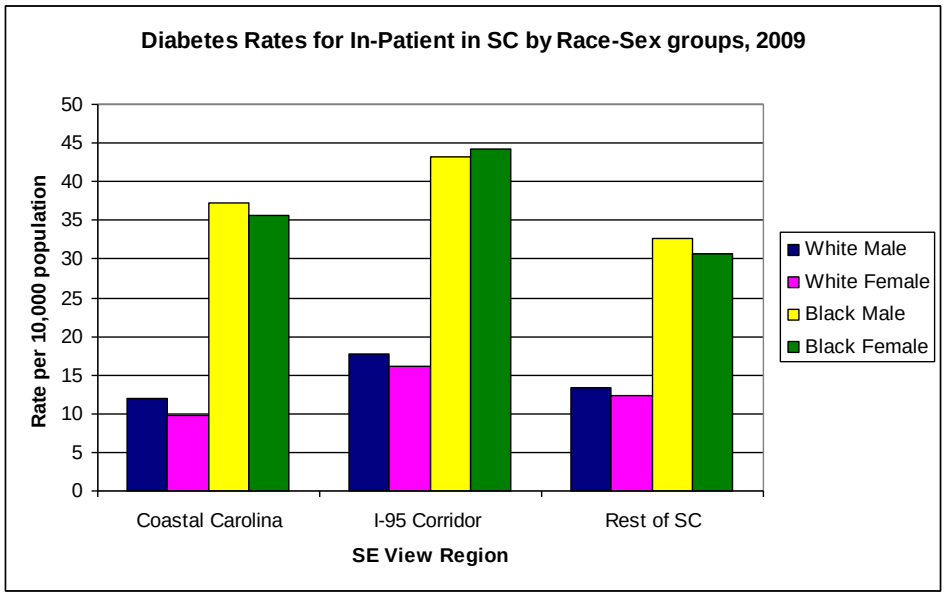




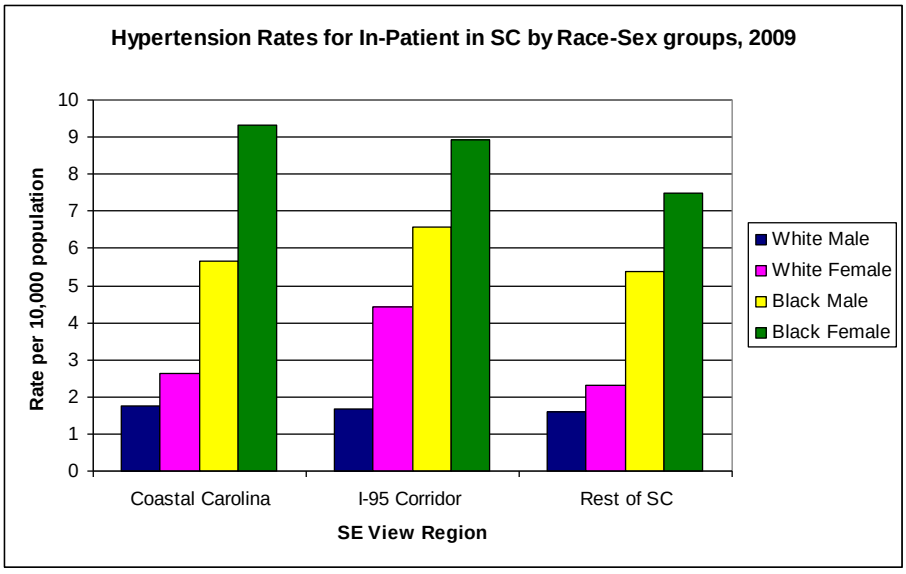
	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	55%	44%	47%



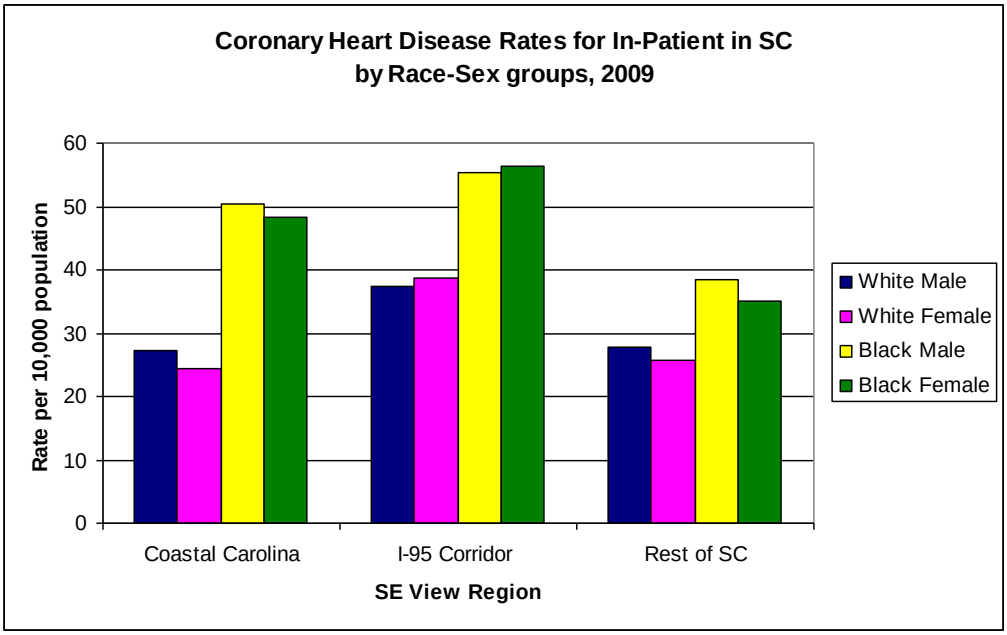
	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	43%	35%	40%



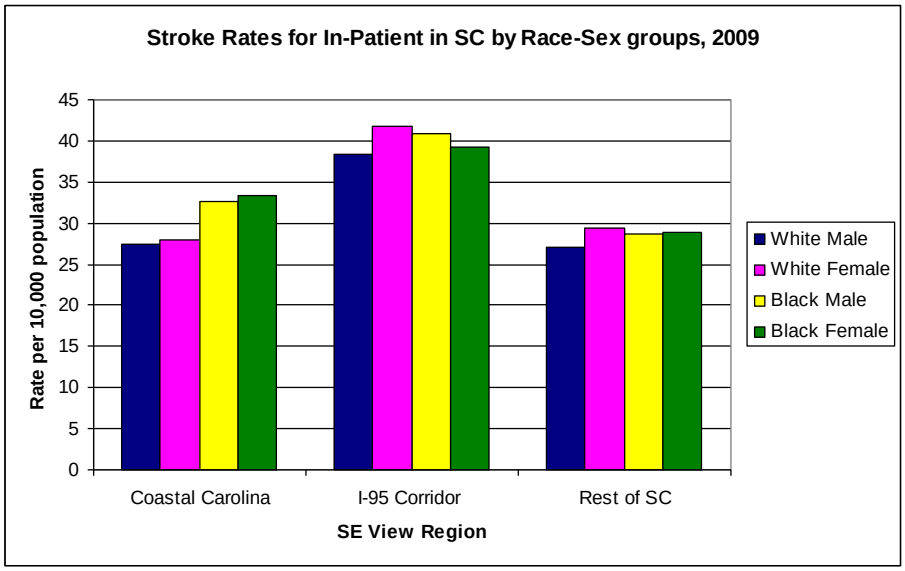
	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	25%	27%	19%



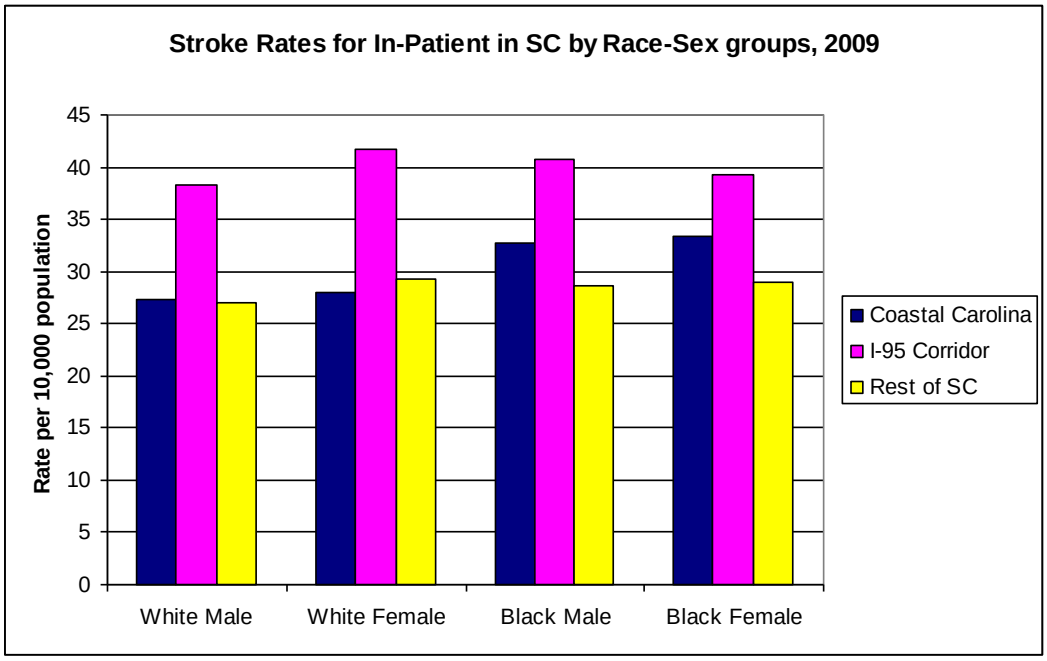
	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	25%	27%	19%

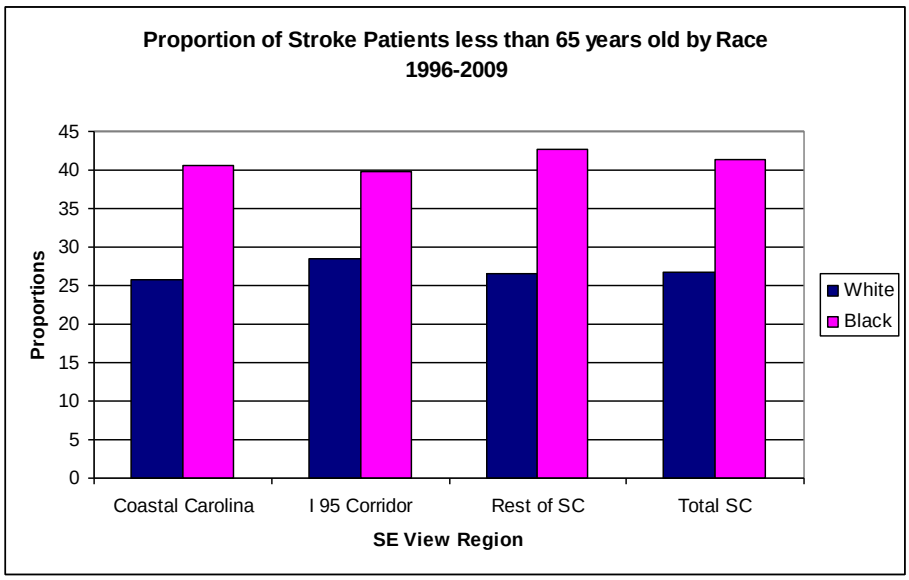


	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	23%	18%	10%

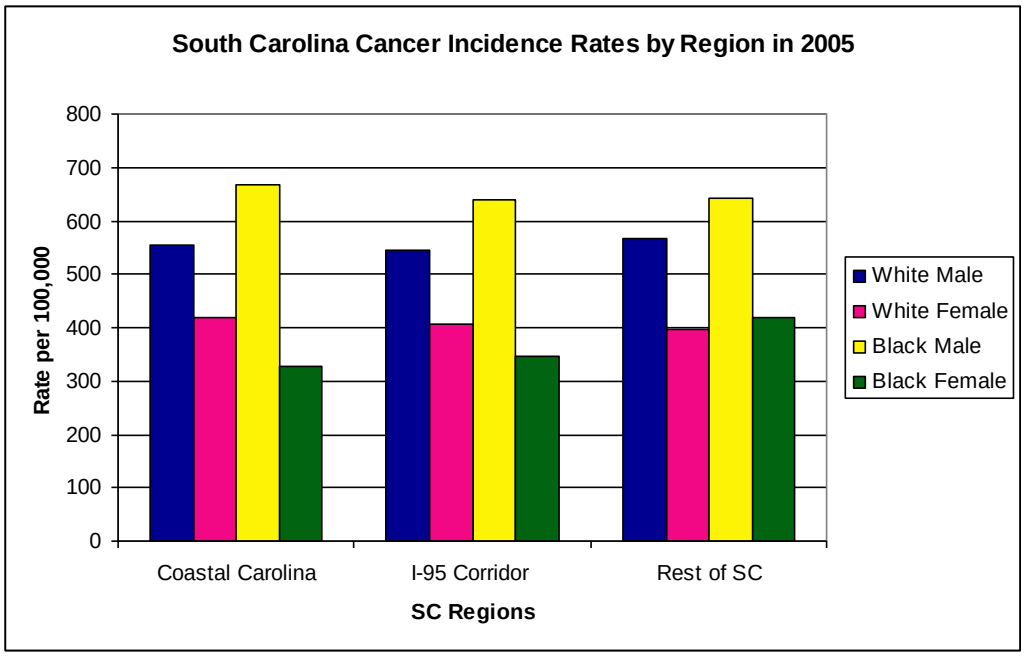


	Absolute Difference		
	Coastal Carolina	I-95 Corridor	Rest of SC
Race	5%	0%	1%

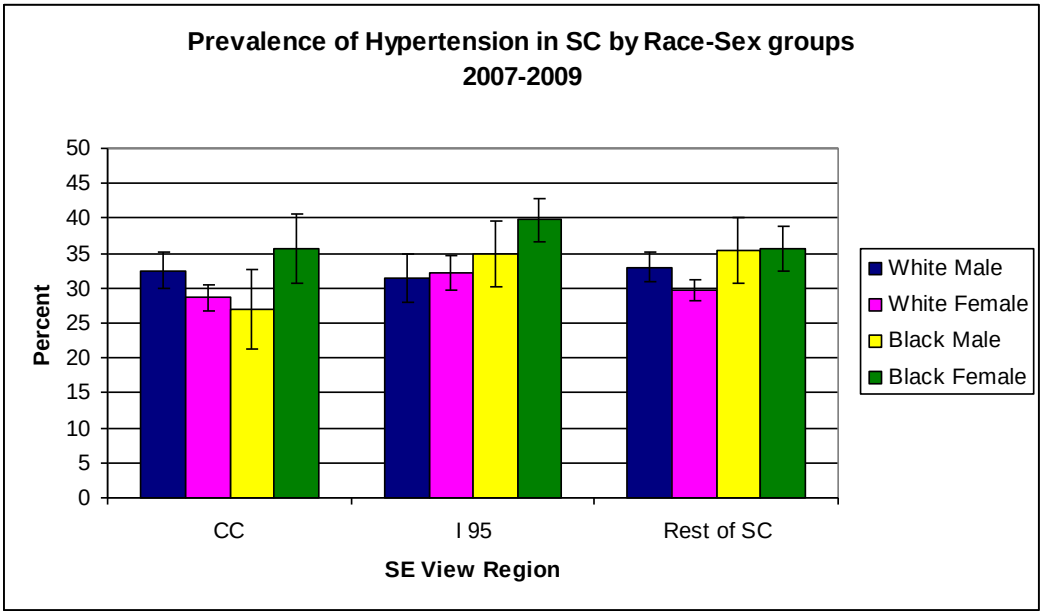




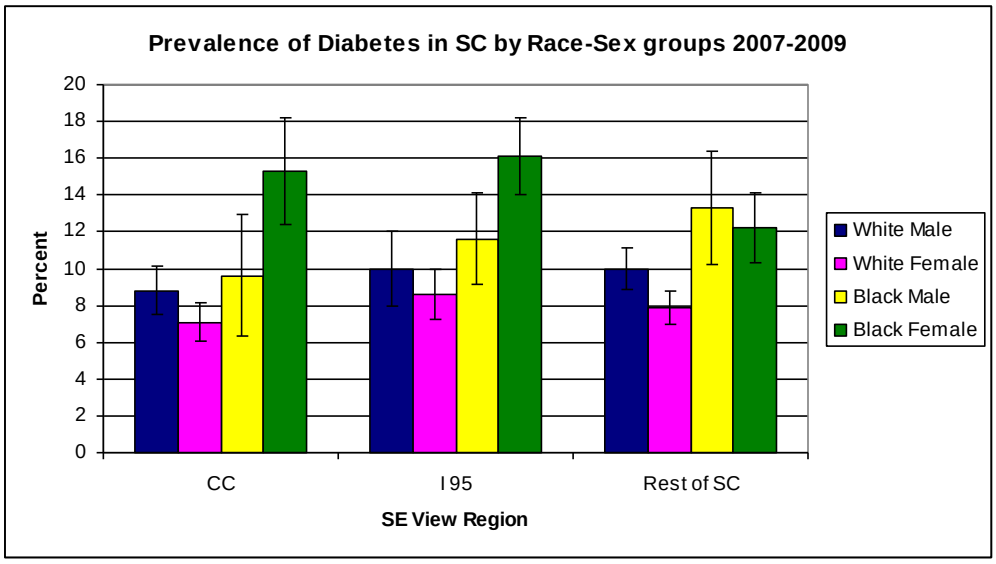
	OR	95% CI	p-value
Coastal Carolina	1.96	1.87-2.06	*<.0001*
I 95 Corridor	1.67	1.60-1.74	*<.0001*
Rest of SC	2.07	2.01-2.14	*<.0001*
Total SC	1.93	1.89-1.97	*<.0001*



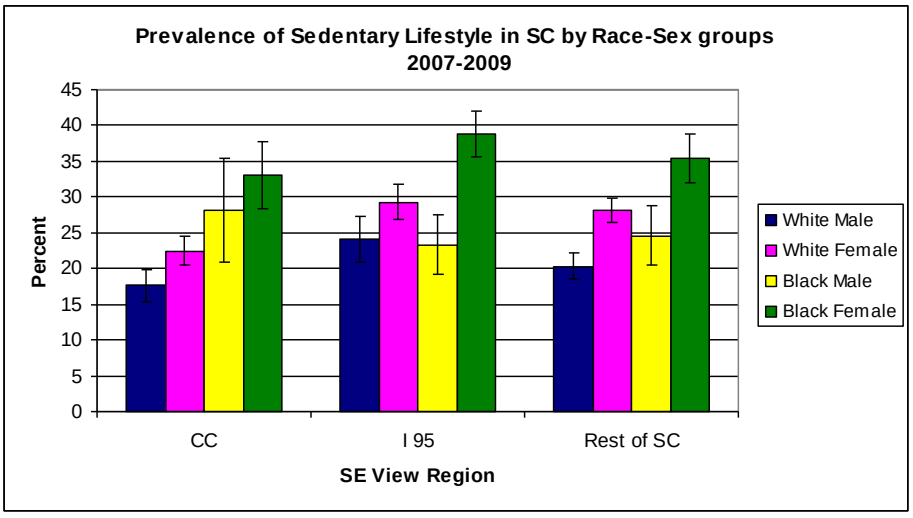
SC DHEC - BRFSS Survey Data: Diagnosed with Hypertension by a health professional



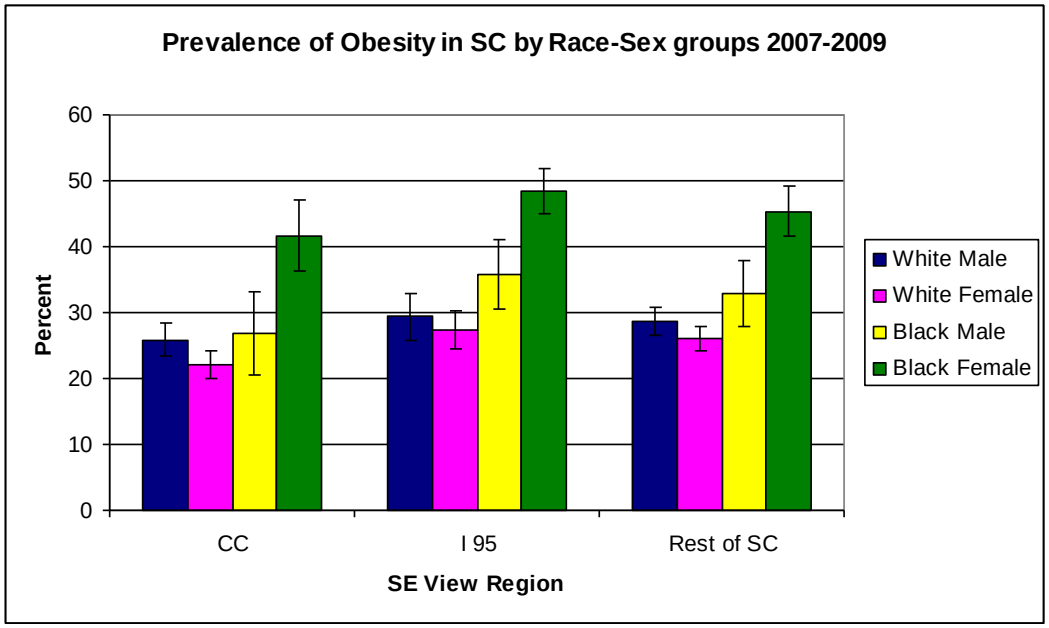
SC DHEC - BRFSS Survey Data: Diagnosed with Diabetes by a health professional



SC DHEC - BRFSS Survey Data: Sedentary = No physical activity or exercise in the last 30 days



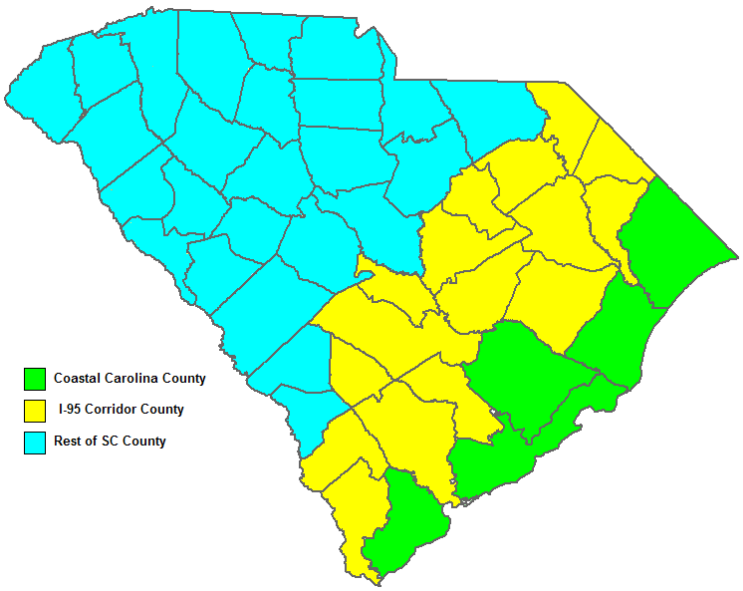
SC DHEC - BRFSS Survey Data: Obese = BMI greater than or equal to 30



Appendix 14

County	Region
BEAUFORT	Coastal Carolina
BERKELEY	Coastal Carolina
CHARLESTON	Coastal Carolina
GEORGETOWN	Coastal Carolina
HORRY	Coastal Carolina
BAMBERG	I-95 Corridor
CALHOUN	I-95 Corridor
CLARENDON	I-95 Corridor
COLLETON	I-95 Corridor
DARLINGTON	I-95 Corridor
DILLON	I-95 Corridor
DORCHESTER	I-95 Corridor
FLORENCE	I-95 Corridor
HAMPTON	I-95 Corridor
JASPER	I-95 Corridor
LEE	I-95 Corridor
MARION	I-95 Corridor
MARLBORO	I-95 Corridor
ORANGEBURG	I-95 Corridor
SUMTER	I-95 Corridor
WILLIAMSBURG	I-95 Corridor
ABBEVILLE	Rest of SC
AIKEN	Rest of SC
ALLENDALE	Rest of SC
ANDERSON	Rest of SC
BARNWELL	Rest of SC
CHEROKEE	Rest of SC
CHESTER	Rest of SC
CHESTERFIELD	Rest of SC
EDGEFIELD	Rest of SC
FAIRFIELD	Rest of SC
GREENVILLE	Rest of SC
GREENWOOD	Rest of SC
KERSHAW	Rest of SC
LANCASTER	Rest of SC
LAURENS	Rest of SC
LEXINGTON	Rest of SC
MCCORMICK	Rest of SC
NEWBERRY	Rest of SC
OCONEE	Rest of SC
PICKENS	Rest of SC
RICHLAND	Rest of SC
SALUDA	Rest of SC
SPARTANBURG	Rest of SC
UNION	Rest of SC
YORK	Rest of SC

SE VIEW
Regions of Interest (ROI)



Appendix 15

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Department of Neurosciences
Neurology – MUSC Stroke Center
19 Hagood Avenue
Suite 501 HOT, MSC 805
Charleston, SC 29425-8050
Tel 843 792 3020
Fax 843 792 2484
www.musc.edu

SE VIEW SSRI (Stroke Team)

FY2011 Promotional Activities Update

(July 1, 2010 – June 30, 2011)

Online access to materials may be found at:

MUSChealth.com – *The online presence for patients and referring physicians at MUSC*
http://www.muschealth.com/stroke/reach.htm

MUSC.edu – *The website of the Medical University of South Carolina*
http://academicdepartments.musc.edu/musc/news/health_news/may10_stroke_adams.htm

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A. **ARTICLES and PUBLICATIONS:**

1. August 24, 2010 – Edward Jauch, MD – eMedicine – Acute Stroke Management,
2. September 2, 2010 - Jauch - eMedicine – Inhalants (Neurotoxicology),
3. September 5, 2010 - Post & Courier; Bridging the doctor-patient gap http://www.postandcourier.com/news/2010/sep/05/bridging-the-doctor-patient-gap/#comments
4. September 6, 2010 - Island Packet – Coastal Carolina…Telemedicine
5. December 19, 2010 - Post & Courier: MUSC is state's top-rated stroke hospital, but some say other facilities provide adequate care too. http://www.postandcourier.com /news/2010/ dec/19/19stroke/
6. January 3, 2011 – Daniel Lackland, DrPH - AOL Health, Red Meat Increases Stroke Risk in Women, Study Finds. http://www.aolhealth.com/2011/01/03/red-meat-women-stroke-risk/
7. January 10, 2011 - Adams/Jauch - Post & Courier; Stroke Systems of Care: Stroke care law proposed: Report urges treatment at MUSC for most serious cases http://www.postandcourier.com/news/2011/jan/10/stroke-care-law-proposed/
8. January 24, 2011 – Post & Courier, Letters to the Editor; MUSC Winners http://www.postandcourier.com/news/2011/jan/24/letters-to-the-editor/
9. January 29, 2011 – Adams/Jauch - Island Packet: Would proposed protocols save more stroke patients? http://www.islandpacket.com/2011/01/29/1529069/would-proposed-protocals-save.html and http://newsroom.muschealth.com/index.php/ 2011/01/sc-physicians-and-lawmakers-want-to-change-stroke-care/
10. March 3, 2011 – Robert Adams, MD – Neurology Today, Anecdotal Reports Supported by Empirical Data: Designated Stroke Center Have Better Survival Rates.
11. April 29, 2011 – Jauch - AARP Bulletin, Are You Having a Stroke? What you need to know to help yourself and others http://www.aarp.org/health/conditions-treatments/info-04-2011/are-you-having-a-stroke.html

12. May 4, 2011 – MUSCHealth CommunityBlog – Bruce's Story http://newsroom.muschealth.com/index.php/2011/05/bruces-story/
13. May 2011 (Stroke Month) – Jauch - Island Eye News (2 articles)
    - May 13: "A Stroke of Good Luck," http://islandeyenews.com/?page_id=2942
    - May 27: "Time is Brain: What to Do When Stroke Strikes." http://islandeyenews.com/?page_id=2960

B. TV and RADIO:

1. November 22, 2010 - Live 5 News; MUSC new NeuroAngio Suite. http://www.live5news.com/Global/story.asp?S=13551947 and http://www.abcnews4.com/global/ category.asp?c=189729&clipId=5318774&autostart=true
2. March 4-6, 2011 - Drs. Greenberg and Adams will be on SCETV's The Big Picture tonight at 7:30 to talk about MUSC's stroke program. The radio version of the program aired on all NPR news stations at 1 p.m. on March 5 and again on Sunday (March 6) at 9 p.m. http://www.scetv.org/index.php/the_big_picture/show/winthrop_poll/.
3. May 18, 2011 – LowCountry Live interview with Dr. Christine Holmstedt. TV segment on stroke awareness as part of MUSC stroke month promotional efforts. She will also be doing a follow up performance on May 26th with the team at LowCountry Live.

C. RECOGNITION and AWARDS:

1. 2011 - MUSC recipient of the HealthGrades Stroke Care Excellence Award™. Hospitals receiving this honor were in the top tier in the HealthGrades stroke care ratings. http://www.healthgrades.com/consumer/index.cfm?fuseaction=mod&modtype=hospitals&modact=hospitals_search_results&prodtype=hosprat&state=SC&city=Charleston&maparea=&proc=&tabset=sea&service_line=NEU
2. 2010-2011 – Lackland - Spokesman - American Stroke Association.
3. 2011 – Lackland - Leadership Committee - Stroke Council.
4. October 15, 2010- Adams - Invited onto the Editorial Board of Frontiers in Teleneurology
5. October 21, 2010 - Adams – Elected Vice President - Council of Chairs (Columbia, SC)
6. October 25, 2010 - Lackland - Invited to serve on the Board of Directors for World Hypertension League as of November 1, 2010 (2-year term)
7. November 4, 2010 – New SCTR KL2 Scholar Announced, Congratulations to Tanya Turan, MD - Department of Neurosciences SCTR's newest KL2 Scholar. Dr. Turan's research project is titled "Characterization of Intracranial Stenosis Using High Resolution MRI (CHIASM)."
8. December 14, 2010 - Jauch - Appointment as Review Editor of Frontiers in Stroke
9. March 28, 2011 – Adams: Invited to join the Editorial Board of World Journal of Methodology (WJM). Officially accepted as a member of the WJM Editorial Board.
10. April 29, 2011 – Etta Pisano announced: The College of Medicine's Research Strategic Plan, is putting together committees to focus initially on the areas of genetics, population sciences, and infrastructure. The Population Sciences Committee has now been formed, and I will be meeting with them to charge the committee in the near future. Dr. Crosson will serve as chair of the committee and members include Prabhakar Baliga (surgery), Marvella Ford (biostats/epi), Laura Goetzl (ob/gyn), Thomas Hulsey

(pediatrics), Dan Lackland (neurosciences), Chip Mainous (family medicine), Bill Moran (medicine), and Yuko Palesch (biostats/epi).

D. **REACH HOSPITALS & OTHER PARTNERS and COMMUNITY BLOGS:**

1. 2010 - Piedmont REACH Ad - HeraldOnLine.com
2. August 2010 - McLeod REACH Ad "Time Lost is Brain Lost" - Sasee Magazine
3. October 1, 2010 - Coastal Carolina's Primary Stroke Center stand ready for BAT Alerts – "Don't wait; call 911" Bluffton Today. http://www.blufftontoday.com/news/2010-09-30/don%E2%80%99t-wait-call-911
4. October 6, 2010 - Coastal Carolina Hospital's Stroke Care Program Awarded Certification From The Joint Commission http://www.ccmc-cares.com/en-US/aboutUs/hospitalNews/PressReleases/Pages/StrokeCareProgramCertification.aspx
5. November 17, 2010 - Dillon, REACH MUSC Ad, Post & Courier. https://www.musc.edu/ourmusc/print.html
6. January 6, 2011 – Marion Regional Health Care System – Lacy Edwards Family Letter – Dr Adams.
7. January 20, 2011 – Piedmont, The Herald; "Stroke center is now nearby, Piedmont is accredited to treat strokes." http://www.heraldonline.com/2011/01/20/2767628/stroke-center-is-now-nearby.html##ixzz1BgLxPti7
8. January 20, 2011 – Piedmont, MUSC Health Community BLOG; Rock Hill Residents Now Have Access to an Accredited Primary Stroke Center and MUSC Stroke Experts http://newsroom.muschealth.com/index.php/2011/01/reach-musc-expanding-its-reach-to rock-hill-residents/
9. January 27, 2011 – Seacoast Medical Center & Seacoast Neurology Associates - Physician commendation and REACH patient referral – Dr Holmstedt (email).
10. March 8, 2011 – Piedmont REACH Billboard in Rock Hill. SC
11. April 8, 2011 - Coastal Carolina - Hardeeville Hospital Honored for Stroke Program. http://www2.wsav.com/news/2011/apr/08/hardeeville-hospital-honored-for-stroke-14896-vi-76393/
12. June 1, 2011 – Coastal Carolina – Bluffton Sun; Editorial – REACH patient testimonial. http://blufftonsun.com

FY2011 Community Blogs:

13. The wife of a REACH MUSC patient from Coastal Carolina submitted their experience: http://newsroom.muschealth.com/index.php/2011/05/bruces-story/
14. The Island Packet in Hilton Head Island discusses propose stroke legislation and Coastal Carolina's participation in REACH MUSC: http://newsroom.muschealth.com/index.php /2011/01/sc-physicians-and-lawmakers-want-to-change-stroke-care/
15. Elizabeth Lafata from Myrtle Beach credits her great outcome to REACH MUSC http://newsroom.muschealth.com/index.php/2011/01/musc-only-hospital-in-sc-with-a-comprehensive-stroke-and-cerebrovascular-center/

E. **VIDEOS, PODCASTS** (MUSChealth.com and videos on YouTube):

1. July 12, 2010 – Adams - YouTube; SCHA Weekly Updates 2010, Every Patient Counts Multimedia Report. http://www.magazooms.com/reader/index.php?mzID=100525151837
2. November 22, 2010 – Turner - Live 5 News- New Neuro Angio Suite http://www.abcnews4.com/global/category.asp?c=189729&clipId=5318774&autostart=true
3. FY2011: A REACH MUSC Stroke patient returns to MUSC to thank staff: http://www.muschealth.com/video/default.aspx?videoId=10580

F. **BROCHURES and OTHER OUTREACH MATERIALS:**

1. July 15, 2010 - Save the Date postcard; Kiawah TCD Course; MUSC
2. March 2011 - Coastal Carolina; Stroke: Know the Symptom, Act FAST

G. **MEETINGS, CONFERENCES and PRESS CONFERENCES:**

1. September 24, 2010 – State University of New York at Stony Brook: Meeting of the Minds Conference – RJ Adams – "Building a Stroke Program --- Now within REACH," Stony Brook, NY
2. October 6-7, 2010 – ACI Stroke Conference: Comprehensive Stroke Centers of Excellence - Adams – Chicago, IL
3. November 19, 2010 - SCTR "Scientific Retreat on Telemedicine" – Adams (Co-Chair) – "Evaluating the Potential of REACH MUSC as a Research Network," Charleston, SC
4. November 16-17, 2010 - John Herrick Symposium - 100th Annual Sickle Cell Symposium - Adams – "Stroke" - Bethesda, MD.
5. December 1, 2010 - S.C. System of Stroke Care Plan presented to governor
    - Press conference in January (Adams/Jauch) – Columbia, SC
6. February 2011 - International Stroke Conference "Geographic Disparities in Elevated Blood Pressures, but not Resistant Hypertension in the Southeast," Los Angeles, CA.
7. February 25, 2011, 2011 SCTR Scientific Retreat: Regeneration, Recovery, Rehabilitation & Return of Function of Persons with Neurological Disorders (R4) - Adams (Co-Chair) - "A Snapshot of MUSC Stroke Patients,", Charleston, SC.
8. March 11-12, 2011 – 12th Annual Stroke Belt Consortium Conference – Lackland – REACH Poster presentations - Orlando, FL.
9. April 2, 2011 – O'QUIN (Outpatient Quality Improvement Network): 2011 O'Quinn Community-Based Practice Research Network Symposium – Dan Lackland DrPH (Co-Chair) Session Moderator and REACH Poster Presentations, Columbia, SC.
10. April 9, 2011 – MUSC Stroke Symposium – Debenham – REACH Presentation, Charleston, SC.
11. April 12, 2011 – SC Rural Health Conference; Telemedicine Panel – Ellen Debenham, RN – "A Telemedicine Facilitated Network for Urgent Stroke Treatment in South Carolina," Myrtle Beach, SC.

12. May 21, 2011 – Florence Community Leaders Institute; Health Disparities/Health Issues Session – Robert J. Adams, MD. – "SE VIEW Stroke and Stroke Risk Reduction Initiative," Florence, SC.
13. May 21, 2011 – Young Stroke Expo 2011 – Ellen Debenham, RN – "REACHing Towards Better Stroke Care in South Carolina," Litchfield, SC.
14. June 12, 2011 - Academic Health Organization - Abby Kazley, PhD – "REACH MUSC" Poster Presentation, Seattle, WA.

H. **CME TRAINING / PRESENTATIONS:**

1. July 15-18, 2010 –MUSC TCD Symposium: "Using Transcranial Doppler, MRI/MRA and Transfusion to Prevent Stroke in Sickle Cell Disease," Kiawah Island, SC
    - Trained people from 8 countries in 2010. Countries trained during past 3 years included: Israel, Italy, Pakistan, Brazil, Colombia, Venezuela, Mexico, England, Australia, Jamaica, Trinidad & Tobago, Canada & USA
2. February 15, 2011 – Neurosciences Grand Rounds – Lackland - "Factors Associated with Stroke Risks in the Southeast," Charleston, SC
3. April 7 and 28, 2011 – BAT Lecture (Brain Attack Team) – Jauch – Charleston, SC.
4. April 7, 2011 - AHEC SCHOOLS Tele-CME Presentation - Robert J. Adams, MD; "Diagnosis and Treatment of Stroke in South Carolina: An Application of Tele-Medicine" - at 7:30am and 12:00pm (1-hour session; recorded).
5. April 19, 2011 – AHEC SCHOOLS Tele-CME Presentation - Edward C. Jauch, MD, MS "Stroke: The First 3+ Hours Initial Management and Implications for the Emergency Department" - at 7:30am and 12:00pm(1-hour session; recorded).
6. May 10, 2011 0 - AHEC SCHOOLS Tele-CME Presentation - Daniel T. Lackland, DrPH; "Hypertension and Diabetes: Stroke Risks in South Carolina" - at 7:30am and 12:00pm (1-hour session; recorded).

I. **SmartState (a.k.a. Centers of Economic Excellence - COEE):**

1. October 8, 2010 - Professor Robert J. Adams nominated for the 2010-2011 Vice-Chair of the CoEE Council of Chairs
2. December 2011- COEE National Conference Committee - Adams - Charleston, SC

J. **HEALTH SCIENCES SOUTH CAROLINA (HSSC):**

K. **RESEARCH SUBMISSIONS/LETTERS OF SUPPORT:**

Date	Recipient	Purpose	Other
2/21/11	To Whom it May Concern	Confirm support of R15 application being submitted by Dr's Chris Gregory and Mark Bowden	Entitled "Mechanisms of Response Guide Decision-Making for Walking Recovery Post-Stroke"
3/11/11	Dr. Melvin Freedman, Chair, Promotions Committee Department of Pediatrics Hospital for Sick Children Toronto, Ontario (About Dr. Melanie Kirby)	Confirming the important contributions that Dr. Kirby has made as related to her role as a collaborator on multicenter studies including PI for STOP II at the SickKids site.	
4/11/11	Michelle Woodbury	Lletter of support for SCTR Retreat Themes Pilot Project Grant Application titled ""A Virtual Reality Environment for Post Stroke Upper Extremity Motor Rehabilitation"	Provide 20 patients from MUSC stroke center that meet the study's criteria.
4/15/11	To Whom it May Concern	Support of "SCTR Scientific Retreat Themes Related Pilot Project Grant" submitted by Dr. Mark Bowden entitled "Factors Contributing to Falls Early after Stroke" and agree to mentor him as an Early Career Investigator	
5/23/11	Michelle Woodbury	Letter of support for Veterans Administration Merit Award Grant Application titled "Patient-Targeted Upper Extremity Rehabilitation After Stroke"	MUSC center can provide 108 patients over 4 year study period
2011	Debra Simmons, R.N., M.S. Executive Director COSEHC Winston-Salem, NC	Support Andrea Boan for the Warren COSEHC Post-Doctoral Fellowship	
2011	Dr. Dorn	Support of Jesse Dean's Career Development Award application and his secondary mentor	Jesse Dean proposed line of research deals with improving neurorehabilitation by furthering our understanding of the mechanisms which underlie the reduced functional mobility following a stroke

Date	Recipient	Purpose	Other
2011	Colleagues of the American Heart Association	Letter of Recommendation for Jordan Magarik for the American Heart Association's Council-Sponsored Student Scholarship/Grant	

Appendix 16

SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

FY2011 SSRI GANTT CHART *(July 2010 - Jun 2011)*

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
I. SSRI Program Administration: *Maintain a strong, multidisciplinary team able to support program aims in a collaborative manner*						
	A. Team Building and Program Coordination	■Ongoing	■	■	■	■
	☑ Establish SSRI Team	☑Completed	☑	–	–	–
	1. Hold weekly SSRI Team meetings	■Ongoing	☑	☑	☑	☑
	2. Participate in SE-VIEW Committee meetings, as scheduled	■Ongoing	☑	☑	☑	☑
	* Participate in SE-VIEW Strategic Planning Retreats	■Ongoing	☑	–	–	☑
	3. Expand team to include additional members, as appropriate	■Ongoing	–	☑	☑	☑
	4. Meet all program reporting requirements	■Ongoing	☑	☑	☑	☑
	B. Interface and collaborate with potential partners on an ongoing basis and as appropriate	**■Ongoing**	■	■	■	■
	1. MUSC Hollings Cancer Center (HCC) Cancer Disparities Program (CDP)	■Ongoing	☑	☑	●	●
	2. MUSC Community Engagement core & Community Engaged Scholars	■Ongoing	☑	☑	☑	☑
	3. S.C. Statewide AHEC program and AHEC SCHOOLS Tele-Training Program	■Ongoing	☑	☑	☑	☑
	4. Coastal Carolina University - Youth Stroke (Survivors) Program	■Ongoing	☑	☑	☑	☑
	5. USC Stroke Program (Dr Souvik Sen)	**■Ongoing**	■	■	■	■
	* USC/MUSC collaboration with external funding: EMS Linking Demonstration	☑Completed	–	–	☐	☑
	6. MUSC Hypertension Initiative	■Ongoing	●	☑	●	●
	* DHHS Stroke Belt Grant (2004-2008)	☑Completed	–	–	–	☑
	7. Invite potential collaborators to SSRI Team meetings, as appropriate	●As Needed	☑	☑	☑	☑
	C. Conduct site analyses of potential external partners	**●As needed**	●	●	●	●
	☑ Determine Regions of Interest (ROIs) and identify potential partner locations	**☑Completed**	–	☑	●	●
	2. Examine Epidemiology Profile data to identify potential partners	**●As needed**	–	☑	☑	●
	3. Contact potential partners to determine interest	**●As needed**	–	☑	☑	☑
	▪ Colleton Hospital (Walterboro, SC)	■Ongoing	●	●	●	☑
	▪ Clarendon Hospital (Manning, SC)	**☑Completed**	●	☑	☑	●
	▪ Tourney Regional (Sumter, SC)	**☑Completed**	–	☑	☑	–
	▪ Bamberg Hospital (Bamberg, SC)	■Ongoing	–	–	–	☑
	4. Engage existing partners in SSRI activities, as listed below (e.g. Stroke care, CME, &/or Evaluation/Research)	■Ongoing	–	■	■	■
	▪ Williamsburg Regional (Williamsburg, SC)	■Ongoing	–	–	–	☑
	▪ Georgetown Hospital System (Georgetown County)	■Ongoing	–	–	☐	☑
	D. Promote the aims of SE VIEW and SSRI as appropriate	■Ongoing	■	■	■	■
	1. Promotional accomplishments of SSRI Leaders and Team Members	■Ongoing	☑	☑	☑	☑
	A. ARTICLES and PUBLICATIONS	■Ongoing	**See FY2011 Promotional Update for itemized listing of accomplishments by category and date**			
	B. TV and RADIO	■Ongoing				

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
	C. RECOGNITION and AWARDS	■Ongoing				
	D. REACH HOSPITALS & OTHER PARTNERS and COMMUNITY BLOGS	■Ongoing				
	E. VIDEOS and PODCASTS (MUSChealth.com and videos on YouTube)	■Ongoing				
	F. BROCHURES and OTHER OUTREACH MATERIALS	■Ongoing				
	G. MEETINGS, CONFERENCES and PRESS CONFERENCES	■Ongoing				
	H. CME TRAINING / PRESENTATIONS	■Ongoing				
	I. SmartState (a.k.a. Centers of Economic Excellence - COEE)	■Ongoing				
	J. HEALTH SCIENCES SOUTH CAROLINA (HSSC)	■Ongoing				
	K. RESEARCH SUBMISSIONS/LETTERS OF SUPPORT:	■Ongoing				
	☑Preliminary REACH Evaluation	**☑Completed**	☑	☑	–	–
	☑ Begin collection of REACH disparities data					
	☑ Identify baseline REACH disparities data characteristics					
	☑ Develop initial Evaluative Measures related to disparities	**☑Completed**	☑	☑	–	–
	☑ Begin exploration of evaluative criteria from which we can measure impact on disparities, including both qualitative and quantitative data					
	☑ Begin to develop baseline evaluative criteria from which we can measure impact on disparities, such as:					
	☑. Continue development of data collection and reporting processes					
II. SSRI Program Evaluation/Research: *Benchmark regions with & without REACH and evaluate the impact of telemedicine in regard to:*						
	A. Access to Care:	■Ongoing	■	■	■	■
	1. Evaluate access to expert stroke care pre-and post- REACH implementation	■Ongoing	–	■	■	■
	a. Hospitals identified, census data collected, and initial analysis completed	☑Completed	–	☑	–	–
	b. Refine Access to Care Report	☑Completed	–	–	☑	☑
	2. Determine the number of residents who live within 30- & 60-minutes of a primary stroke center (PSC) or a REACH MUSC Telestroke site.	☑Completed	–	■	■	☑
	3. Present ACCESS TO CARE findings	☑Completed	–	–	☑	☑
	a. Initial findings incorporated in SSRI Team posters/presentations	☑Completed	–	–	☑	☑
	b. Abby Kazley, PhD presents initial findings at national conference	☑Completed	–	–	–	☑
	B. Awareness of symptoms; Appropriate response times; Attitudes regarding treatment	■Ongoing	■	■	■	■
	1. All patients having had a REACH Telestroke consult will be surveyed to obtain information related to their recognition and response to the symptoms which led to their REACH stroke consult.	☐Underway	–	☐	☐	☐
	a. Develop initial patient survey, test it & submit it with study protocol to IRB	☑Completed	–	☑	–	–
	*** Protocol with Survey must receives both IRB and TATRC approval**	☒Pending	–	☐	☐	☒ TATRC

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
	b. Collect patient contact data from REACH database; prepare survey mail-out; mail	☐Underway	--	☑	☑	☐
	c. Enter survey into RedCap survey system and begin data entry	☑Completed	--	☑	☑	--
	d. Patient surveying to begin, pending anticipated IRB/TATRC approval	☒Pending	--	--	☐	☒
	e. Initial surveying completed and preliminary results analyzed	☒Pending	--	--		☒
	2. Send letter of introduction to all hospitals and REACH sites introducing SE-VIEW and requesting partner participation	☑Completed	--	--	☑	☑
	C. Time from onset of symptoms to Emergency Department	■Ongoing	■	■	■	■
	1. Obtain EMS "run sheets" on all REACH patients that used EMS.	☐Underway	■	■	■	☐
	a. DHEC data request developed, reviewed & submitted for two NEMSIS II data sets: 1 identified for REACH patients and 1 de-identified for all patients	☑Completed	--	☑	--	--
	b. Receive requested data sets from DHEC	☒Pending	--	--	☐	☒ DHEC
	c. Begin analysis of NEMSIS II data	☒Pending	--	--	--	☒
	2. Examine critical time point data in REACH as potential evaluative criteria	■Ongoing	--	--	☑	■
	a. Extract initial data from REACH database and create initial analysis	☑Completed	--	--	☑	--
	b. Provide data to team members for use in evaluations/benchmarking	☑Completed	--	--	--	☑
	3. Examine feasibility of conducting a community-based assessment regarding related attitudes/opinions (e.g. 911-use, reasons for time delays, potential interventions)	☑Completed	--	--	☑	☑
	a. Collaborate with Community Evaluation team and examine feasibility	☑Completed	--	--	☑	☑
	b. Seek additional funding source and draft proposal(s)	☑Completed	--	--	☑	--
	(1) Submit proposal for SCTR Pilot Project Program funding (04/15/2011)	☑Completed	--	--	--	☑
	* Respond to Award Announcement (05/27/2011)	☑Completed	--	--	--	☑
	4. Seek funding for CEASE (Community Engaged Assessment to Eliminate Stroke)	☐Underway	--	--	--	☐
NEW	5. Conduct literature search of research related to 911 utilization for acute stroke and community awareness/education programs for stroke	☑Completed	--	--	--	☑
	D. Use of Alteplase (tPA):	■Ongoing	■	■	■	■
	1. Obtain two data sets from ORS to assess tPA use and the impact of REACH	☑Completed		☑		
	a. ORS data request submitted and approved	☑Completed		☑	☑	--
	* Obtain ORS data set containing REACH data link, pending Protocol approval	☒Pending				☒ TATRC
	* ORS data set without REACH link received	☑Completed	--	--	--	☑
	b. ORS datasets received and analysis begins	☐Underway	--	--	--	☐
	c. Conduct preliminary analysis	☒Pending				☒
	d. Findings incorporated in SSRI Team posters/presentations	☒Pending	--			☒

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
III. Provider Education: ***Develop, implement and evaluate a Stroke CME program***						
	A. Provide targeted stroke and stroke prevention CME programs to health providers in the ROI.	■Ongoing	■	■	■	■
	1. Begin CME concept development and CME application process	☑Completed	☒	☑	--	--
	2. Examine potential CME training sites and potential partnerships	●As needed	☒	☑	■	●
	☒Determine first In-Person Training site > Tourney Regional (Sumter, SC)	☑Completed	--	☑	--	--
	☒Complete initial CME application and receive program approval	☑Completed	--	--	☒	--
	☒ Deliver initial CME Program	☑Completed	--	--	--	☑
	B. Identify gaps in knowledge, behavior and outcomes and design the CME programs specific to these needs	■Ongoing	■	■	■	■
	1. Conduct initial interview of key personnel at training sites to determine appropriate CME program format for their facility/providers	☑Completed	☒	☒	●	●
	☒ Tourney asked for three 1-hour sessions (rather than an all day program)	☑Completed	--	☑		
	☒Collaborated with AHEC on needs & use of DL to integrate additional providers	☑Completed	--	☑	☒	●
	C. Administer the CME programs through the traditional CME venue of in-person programs, as well as utilizing distance learning technology	■Ongoing	■	■	■	■
	1. Select presenters and establish training dates for initial in-person training programs	☑Completed	☒	☒	☒	--
	☒ Receive buy-in from program presenters; begin exploring training dates	☑Completed	☒	--	--	
	☒ Determine initial training date(s)	☑Completed	--	☒	☒	--
	2. Develop program curriculum	☑Completed	--	☒	☒	☑
	☒ Confer with presenters to determine initial presentation topics	☑Completed	☒	--	--	--
	☒ Collect initial presentation titles & outlines from presenters (for CME application)	☑Completed	--	☒	☒	--
	☒ Finalize initial presentations and collect presentation materials electronically	☑Completed	--	--	☒	☑
	• Refine materials as appropriate based upon initial program review	☑Completed	--	--		☑
	3. Explore utilization of AHEC SCHOOL system for distance learning (DL)	☑Completed	--	☒	☒	--
	4. Utilize AHEC SCHOOLS system to broaden audience & create enduring materials	☑Completed	--	--	☒	☑
	☒ First CME delivered: Hypertension (J. Handler)	☑Completed	--	--	☒	--
	☒ Deliver 3 CME presentations via AHEC system	☑Completed	--	--	--	☑
	5. In-person training delivered and enduring materials created	☑Completed	--	--	--	☒
	D. Create a bank of enduring stroke and stroke prevention education material that can be accessed electronically	■Ongoing	--	--	■	■
	☒**Collect in-person training materials in electronic format for later dissemination**	☑Completed	--	--	☒	☑
	☒ Record AHEC CME presentations as enduring materials	☑Completed	--	--	☒	☑
	☒ CME programs offered online at http://scahec.net/schools/library.html	☑Completed	--	--	☒	☑
	E. The success of the CME will be evaluated by assessing changes in knowledge, behavior and outcomes	■Ongoing	--	--	■	■
	1. Begin development of assessment materials (e.g. program evaluations) and processes	☑Completed	--	--	☒	☒

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
NEW	**EDUCATE THE NEXT GENERATION**	■Ongoing	■	■	■	■
	Individuals mentored by the SSRI Team Leaders					
	* Dr Tanya Turan: KL2 Scholars Application (Awarded 11/2010)	☑Completed				
	* Andrea Boan, PhD candidate: Factors associated with stroke and stroke prevention	☑Completed				
	* Guillermo De Angula, MSCR: Blood Pressure associated with Sickle Cell Patients	☑Completed				
	* Jordan Magarik: Imaging and prediction of stroke outcomes	☑Completed				
	* Thomas Miller, Summer research - medical student: Hypertension in the emergency room: Free clinic	☑Completed				
	* Robert Bryant, Summer research - medical student: Diabetes in the emergency room; Free clinic	☑Completed				
	* Andrew Gundran, Summer undergraduate research program: Atrial fibrillation treatment and risk reduction	☑Completed				
	* Gabriela Keeton, Summer undergraduate research program: Stroke associated pneumonia	☑Completed				
IV. SE-VIEW Data Repository: ***Develop Epidemiology Profiles and maintain overall data sets as a resource for all SE-VIEW cores***						
	A. Determine Region(s) of Interest (ROIs)	☑Completed	--	☑	--	--
	1. Primary ROIs grouped by county into 3 regions: (1) I-95 Corridor; (2) Coastal Carolina; (3) Midlands/Upstate	☑Completed	--	☑	--	--
	2. Begin collecting initial disparities data to determine ROI	☑Completed	--	☑	--	--
	a. Examine initial disparities data and discussed data sets	☑Completed	☑	--	--	--
	b. Begin collecting overall disparities dataset	☑Completed	--	☑	--	--
	c. Begin to standardize data to create the initial SE-VIEW Epidemiology Profile	☑Completed	--	☑	--	--
	d. Present initial findings at SE-VIEW PI Meeting	☑Completed	--	☑	--	--
	B. Acquire and maintain emergency room & hospital databases pertinent to SE-VIEW projects	■Ongoing	■	■	■	■
	1. Obtain and maintain hospitalized ED data (Jan 1996 – 2009).	☑Completed	☑	■	■	■
	2. Obtain and maintain NEMSIS II emergency database from DHEC	❒Underway	--	--	☐	☒
	3. Obtain and maintain ORS patient database	❒Underway	--	--	☐	☒
	C. Acquire and maintain socio-economic status (SES) data sets pertinent to SE-VIEW	■Ongoing	■	■	■	■
	1. Order data set(s)	☑Completed	--	--	☐	☑
	2. Design initial SES analyses	☑Completed	--	--	☐	☑
	3. Refine initial SE-VIEW SES Analysis and report findings	❒Underway	--	--	--	☐
	D. Analyze and report data; utilize the three ROIs	●As needed	●	●	●	●
	1. Refine SE-VIEW Epidemiology Profile	■Ongoing	--	--	☑	■
	2. Provide data to the SE VIEW cores	■Ongoing	--	☑	--	■
V. IRB/ORS: ***Develop study designs, protocols and data requests for review/approval, as required***						
	A. Initial IRB/TATRC Submissions	☐Underway	●	●	●	●
	1. Submit first study protocol for initial IRB approval	☑Completed	--	☑	--	--

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
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6/22/2011

WORK SCOPE	ACTIVITY	STATUS	Q1 (Jul-Sep)	Q2 (Oct-Dec)	Q3 (Jan-Mar)	Q4 (Apr-Jun)
	2. Address any IRB issues and receive IRB approval	☑Completed	--	☑	☑	--
	3. Submit/receive TATRC approval	☒Pending	--	--	☑	☒ TATRC
	4. Begin implementation of first research study protocol	☒Pending	--	--	--	☒
VI. Stroke Care: REACH-MUSC Telestroke Program: ***Improve access to care through the use of telehealth technologies***						
	A. Site Expansion: *Expand geographic access to Stroke Care by adding new REACH sites*	●As needed	●	●	●	●
	#10. McLeod Medical Center in Dillon (Dillon/Dillon County)	☑Completed	☑	--	--	--
	#11. Springs Memorial (Lancaster/Lancaster County)	☑Completed	--	☑	--	--
	#12. Carolina Pines Regional Medical Center (Hartsville/Darlington Co)	☑Completed	--	--	☑	--
	#13. Self Regional Healthcare (Greenwood/Greenwood County)	☑Completed	--	--	☑	--
	#14. Loris Community Hospital (Loris/Horry County)	☑Completed	--	--	☑	--
	#15. Seacoast Medical Center (Little River/Horry County)	☑Completed	--	--	☑	--
	B. Program Expansion: *Collaborate & examine feasibility to expand access to other specialties using REACH technologies*	●As needed	●	●	●	●
	1. MUSC CREST (Sepsis & Trauma) Program	■Ongoing	☑	☑	☑	■
	* Held regular coordinating/collaborating sessions	■Ongoing	☑	☑	☑	☑
	* Attended training at Williamsburg, the first combination REACH/CREST site	☑Completed	☑	☑	☑	--
	2. MUSC Cancer Program (cancer telemedicine)	☑Completed	☑	--	--	--
	3. MUSC Alzheimer's program	☑Completed	☑	--	--	☑
	* Telemedicine for Alzheimer's consultations	☑Completed	--	--	--	☑
	4. Primary Care setting	■Ongoing	--	■	■	■
	a. Begin to develop a model for expansion into primary care	☑Completed	--	☑	●	●
	5. Provide consultative services for those interested in telemedicine applications	●As needed	--	--	☑	●
	* Telemedicine for nursing home consultations	☑Completed	--	--	☑	--
	C. Patient Care/Follow-up:	☑Completed	☑	☑	☑	●
	1. Physician Portal: *Allow referring physicians access to EMR via ECareNet portal*	■Ongoing	■	■	■	■
	a. Investigated use of Physician Portal to improve continuity of care.	☑Completed	☑	☑	--	--
	b. Begin to introduce Physician Portal to new REACH spoke hospitals.	■Ongoing	--	☑	☑	--
	c. Begin to introduce Physician Portal to existing REACH spoke hospitals.	■Ongoing	--	--	--	●
NEW	**2. TELL THE STORY:** ***Document qualitative patient care information***	■Ongoing	■	■	■	■
	a. Develop audio-video presentation (DVD) containing patient stories and incorporation into staff presentations as appropriate	☑Completed	--	--	--	☑
	b. Continue collection/dissemination of patient stories, as appropriate	■Ongoing	■	■	■	■

KEY:				
●As needed	■Ongoing	☐Underway	☑Complete	☒Pending

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SE VIEW Program Planning:
SSRI Gantt Chart

Appendix 1:
FY2011 SSRI Detailed Aims and Activities

6/22/2011

FY2011 SSRI GANTT CHART *(July 2010 - Jun 2011)*

See SSRI Meeting Minutes and Action Items

WORK SCOPE	ACTIVITY	Current Quarter - Action Descriptions
	I. SSRI Program Administration: ***Maintain a strong, multidisciplinary team able t***	
	A. Team Building and Program Coordination	TEAM: Adams, Boan, Brown, Debenham, Ellis, Garry, Hilbert, Jauch, Kazley, Lackland, Peterson, S
	☑ Establish SSRI Team	(Q1-2010) Core Team Established
	1. Hold weekly SSRI Team meetings	See SSRI Meeting Minutes and Action Items
	2. Participate in SE-VIEW Committee meetings, as scheduled	(Q1-4) Team attends SEV Exec Meetings; (Q1) Boan presented Epi data
	* Participate in SE-VIEW Strategic Planning Retreats	(Q1) Attended 1st SEV-SP Retreat; (Q4) Met with SEV-SP Consultant
	3. Expand team to include additional members, as appropriate	Ellis, Egede & Melissa Cox (CE) invited; Ellis joined team; Cox collaborated on CEASE
	4. Meet all program reporting requirements	(Q1-4) Quarterly reports, Gantts and meeting updates completed **Appx1: Aims-Activities**
	B. Interface and collaborate with potential partners on an ongoing basis and as appropriate	**Initial collaborations COMPLETED; Continue to seek potential partners**
	1. MUSC Hollings Cancer Center (HCC) Cancer Disparities Program (CDP)	(Q2) Provided stroke materials for Yemassee Health Fair (CDP: Jim Etheredge)
	2. MUSC Community Engagement core & Community Engaged Scholars	(Q3) M. Cox (Q3-4) Andrews/Cox at special meeting (Q3-4) Collaboration on SCTR CEASE
	3. S.C. Statewide AHEC program and AHEC SCHOOLS Tele-Training Program	(Q3) J. Mandle CME via AHEC; (Q4) 3 CMEs: Adams, Jauch, Lackland
	4. Coastal Carolina University - Youth Stroke (Survivors) Program	(Q3) Plan conference presentation; (Q4) Attended/presented at event
	5. USC Stroke Program (Dr Souvik Sen)	ONGOING
	* USC/MUSC collaboration with external funding: EMS Linking Demonstration	(Q3)Funds awaited to USC & collab. began; (Q4) Dr Sen added to SSRI distribution
	6. MUSC Hypertension Initiative	Invited Brent Egen to Team Meeting; Supported community programs, as needed
	* DHHS Stroke Belt Grant (2004-2008)	(Q4) Consulted with Sheryl Mack regarding this previous initiative
	7. Invite potential collaborators to SSRI Team meetings, as appropriate	(Q1-4) MUSC: C.Ellis, B.Egan, L.Egede, M.Cox (Q4) Lewis B. Morgenstern, MD; Director of the S Professor of Neurology, Emergency Medicine and Neurosurgery, Medical School and Professor of Epi School of Public Health, University of Michigan
	C. Conduct site analyses of potential external partners	**Initial analyses COMPLETED; Scan environmental & conduct analyses AS NEEDED**
	☑ Determine Regions of Interest (ROIs) and identify potential partner locations	(Q3) Boan Epi-update; Kazley Access report; (Q4) Continue updates
	2. Examine Epidemiology Profile data to identify potential partners	
	3. Contact potential partners to determine interest	(Q2) Contacted Clarendon & Toumey; (Q3) Maintained contacts; (Q4) Began to explore others
	▪ Colleton Hosptial (Walterboro, SC)	Examined: Interest in partnering with them; hospital has limited/no interest
	▪ Clarendon Hospital (Manning, SC)	Examined: Interest in partnering with them; hospital has limited interest
	▪ Toumey Regional (Sumter, SC)	Completed
	▪ Bamberg Hospital (Bamberg, SC)	(Q4) Discussed REACH with Bamberg staff at SCORH Rural Health Conference
	4. Engage existing partners in SSRI activities, as listed below (e.g. Stroke care, CME, &/or Evaluation/Research)	Ongoing
	▪ Williamsburg Regional (Williamsburg, SC)	(Q4) Met with Execs; held first CREST Training; Co-presented at SCORH Rural Health Conf.
	▪ Georgetown Hospital System (Georgetown County)	(Q3)Explored expansion of existing partnership for CBPR (Q4) Submitted proposal
	D. Promote the aims of SE VIEW and SSRI as appropriate	**Initial promos COMPLETED; ONGOING promotion of SE VIEW at every opportunity**
	1. Promotional accomplishments of SSRI Leaders and Team Members	**Appx2: PromoUpdate; also Appendices 4, 5, 6, 15, 16, 17 (Presentations/Post**
	A. ARTICLES and PUBLICATIONS	
	B. TV and RADIO	

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WORK SCOPE	ACTIVITY	Current Quarter - Action Descriptions
	C. RECOGNITION and AWARDS D. REACH HOSPITALS & OTHER PARTNERS and COMMUNITY BLOGS E. VIDEOS and PODCASTS (MUSChealth.com and videos on YouTube) F. BROCHURES and OTHER OUTREACH MATERIALS G. MEETINGS, CONFERENCES and PRESS CONFERENCES H. CME TRAINING / PRESENTATIONS I. SmartState (a.k.a. Centers of Economic Excellence - COEE) J. HEALTH SCIENCES SOUTH CAROLINA (HSSC) K. RESEARCH SUBMISSIONS/LETTERS OF SUPPORT:	**Appx2: PromoUpdate**
	☑Preliminary REACH Evaluation	**Initial Evaluation COMPLETED**
	☑ Begin collection of REACH disparities data	(Q1-2010) Pulled preliminary REACH data and examined baseline characteristics of REACH patients hospitals. These initial analyses led to development of Q2-2010 Work Scope action items included un headings (e.g. the Benchmarking/Evaluation Study below)
	☑ Identify baseline REACH disparities data characteristics	
	☑ Develop initial Evaluative Measures related to disparities	**Initial Evaluation COMPLETED; Epidemiology Core established (see below)**
	☑ Begin exploration of evaluative criteria from which we can measure impact on disparities, including both qualitative and quantitative data.	(Q1-2010) Began exploration and development of initial evaluation measures and collection of data. T to development of current Q2-2010 Work Scope action areas including the Benchmarking/Evaluation development of the SEV Data Repository (III. below)
	☑ Begin to develop baseline evaluative criteria from which we can measure impact on disparities, such as:	
	☑ Continue development of data collection and reporting processes	
	II. SSRI Program Evaluation/Research: ***Benchmark regions with & without REA***	
	A. Access to Care:	**Initial assessment COMPLETED; Further assessment ONGOING**
	1. Evaluate access to expert stroke care pre-and post- REACH implementation	Kazley:
	a. Hospitals identified, census data collected, and initial analysis completed	(Q2) Initial data collected
	b. Refine Access to Care Report	(Q3) Data extracted/integrated; Initial abstract submitted (Q4) Further abstract/presentation/publicatio
	2. Determine the number of residents who live within 30- & 60-minutes of a primary stroke center (PSC) or a REACH MUSC Telestroke site.	Kazley
	3. Present ACCESS TO CARE findings	
	a. Initial findings incorporated in SSRI Team posters/presentations	(Q3-4) Data used in Staff posters/presentation submissions
	b. Abby Kazley, PhD presents initial findings at national conference	(Q4) Academic Health Organization "REACH MUSC" Poster Presentation, Seattle, WA **Appx 15: AcademyHealth Access Poster**
	B. Awareness of symptoms; Appropriate response times; Attitudes regarding treatment	**Initial assessment PENDING TATRC protocol approval; Further assessment ONGOING** **Appx3: Protocol with Attachments, including Patient Letter & Survey**
	1. All patients having had a REACH Telestroke consult will be surveyed to obtain information related to their recognition and response to the symptoms which led to their REACH stroke consult.	***** WAITING FOR TATRC APPROVAL OF STUDY PROTOCOL*****
	a. Develop initial patient survey, test it & submit it with study protocol to IRB	Kazley, Boan, Garry: Created, reviewed and tested in Nov; Approved by IRB
	*** Protocol with Survey must receives both IRB and TATRC approval**	(Q2) MUSC IRB; (Q3) IRB approval submitted to TATRC; (Q4) Final approval pending

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	b. Collect patient contact data from REACH database; prepare survey mail-out; mail	(Q2) Extracted data; (Q3-4) Prepared/updated mailout; (Q4) Need TATRC approval to mail
	c. Enter survey into RedCap survey system and begin data entry	Peterson, Yim
	d. Patient surveying to begin, pending anticipated IRB/TATRC approval	
	e. Initial surveying completed and preliminary results analyzed	
	2. Send letter of introduction to all hospitals and REACH sites introducing SE-VIEW and requesting partner participation	Adams: (Q2) draft; (Q3) general distribution (Q4) REACH draft/distribution
	C. Time from onset of symptoms to Emergency Department	**Initial assessment PENDING data download; Further assessment ONGOING (Jauch)**
	1. Obtain EMS "run sheets" on all REACH patients that used EMS	***** WAITING FOR DHEC APPROVAL/RELEASE OF DATA*****
	a. DHEC data request developed, reviewed & submitted for two NEMSIS II data sets: 1 identified for REACH patients and 1 de-identified for all patients	(Q2) Request submitted; **Appx8: DHEC Data Request** Initial assessment PENDING DHEC approval/data release; Further assessment ONGOING
	b. Receive requested data sets from DHEC	(Q3-4) Awaiting DHEC approval
	c. Begin analysis of NEMSIS II data	
	2. Examine critical time point data in REACH as potential evaluative criteria	**Initial Evaluation COMPLETED; Further assessment ONGOING**
	a. Extract initial data from REACH database and create initial analysis	(Q3) Pulled initial data set and created preliminary tables
	b. Provide data to team members for use in evaluations/benchmarking	(Q4) Team members utilized data in presentations and proposal
	3. Examine feasibility of conducting a community-based assessment regarding related attitudes/opinions (e.g. 911-use, reasons for time delays, potential interventions)	**Initial Proposal/Submission COMPLETED**
	a. Collaborate with Community Evaluation team and examine feasibility	(Q3) Met with Jeannette Andrews & Melisa Cox; partnership began
	b. Seek additional funding source and draft proposal(s)	(Q3) Decided to seek SCTR funding and began draft proposal; **Appx 13: CEASE Proposal**
	(1) Submit proposal for SCTR Pilot Project Program funding (04/15/2011)	(Q4) CEASE Proposal submitted for SCTR Pilot Project Program funding (Announcement: 5/27/11)
	* Respond to Award Announcement (05/27/2011)	(Q4) Did not receive SCTR Pilot Funding
	4. Seek funding for CEASE (Community Engaged Assessment to Eliminate Stroke)	**Assessment of other funding opportunities UNDERWAY**
NEW	5. Conduct literature search of research related to 911 utilization for acute stroke and community awareness/education programs for stroke	**Appx7: Literature Search References**
	D. Use of Alteplase (tPA):	**Initial assessment PENDING data linkages; Further assessment ONGOING**
	1. Obtain two data sets from ORS to assess tPA use and the impact of REACH	**Appx3: Protocol with Attachments, including ORS Request** (Kazley/Bsan)
	a. ORS data request submitted and approved	(Q2) Data request submitted; (Q3) Request approved; Initial assessment PENDING TATRC protocol assessment ONGOING
	* Obtain ORS data set containing REACH data link, pending Protocol approval	***** WAITING FOR TATRC APPROVAL PRIOR TO DATA LINK*****
	* ORS data set without REACH link received	
	b. ORS datasets received and analysis begins	
	c. Conduct preliminary analysis	
	d. Findings incorporated in SSRI Team posters/presentations	

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WORK SCOPE	ACTIVITY	Current Quarter - Action Descriptions
	III. Provider Education: ***Develop, implement and evaluate a Stroke CME program***	**Appx 9: Stroke CME**
	A. Provide targeted stroke and stroke prevention CME programs to health providers in the ROI.	**Initial series COMPLETED; Further provider education ONGOING**
	1. Begin CME concept development and CME application process	(Q1-2) Process begun
	2. Examine potential CME training sites and potential partnerships	(Q1-4) Potential partners examined
	☑Determine first In-Person Training site > Toumey Regional (Sumter, SC)	(Q2) Toumey chosen; live presenations offered via tele-training utilized
	☑Complete initial CME application and receive program approval	(Q3) 1st CME application submitted and approved
	☑ Deliver initial CME Program	(Q4) Three 1-hour sessions completed using AHEC tele-training; taped for enduring materials
	B. Identify gaps in knowledge, behavior and outcomes and design the CME programs specific to these needs	**Initial assessment COMPLETED; Further assessment ONGOING**
	1. Conduct initial interview of key personnel at training sites to determine appropriate CME program format for their facility/providers	
	☑ Toumey asked for three 1-hour sessions (rather than an all day program)	(Q2) Completed
	☑Collaborated with AHEC on needs & use of DL to integrate additional providers	(Q2-3) Collaboration & testing; (Q4) Continue collaboration/review as needed
	C. Administer the CME programs through the traditional CME venue of in-person programs, as well as utilizing distance learning technology	**Initial assessment COMPLETED; Further assessment ONGOING** (Q1-2) Assessed sites; (Q2) Chose Toumey & assessed their needs (Q3) Tested AHEC system (Q4) Conducted 3 sessions
	1. Select presenters and establish training dates for initial ~~in-person~~ training programs	
	☑ Receive buy-in from program presenters; begin exploring training dates	
	☑ Determine initial training date(s)	(Q2) Toumey rquested three 1-hour sessions; (Q3) Dates selected (Apr/May 2011)
	2. Develop program curriculum	
	☑ Confer with presenters to determine initial presentation topics	
	☑ Collect initial presentation titles & outlines from presenters (for CME application)	(Q2) Jauch & Lackland; (Q3) Adams
	☑ Finalize initial presentations and collect presentation materials electronically	
	▪ Refine materials as appropriate based upon initial program review	(Q3-4) Presentations adjusted as needed
	3. Explore utilization of AHEC SCHOOL system for distance learning (DL)	Used AHEC SCHOOLS system
	4. Utilize AHEC SCHOOLS system to broaden audience & create enduring materials	Conducted 4 sessions: Feb-May 2011
	☑ First CME delivered: Hypertension (J. Handler)	(Q3) 1st tele-CME delivered
	☑ Deliver 3 CME presentations via AHEC system	(Q4) Scheduled/administered 3 tele-CMEs via AHEC
	5. In-person training delivered and enduring materials created	(Q4) Training delivered in-person in Charlestoin and via tele-training throughout the state
	D. Create a bank of enduring stroke and stroke prevention education material that can be accessed electronically	**Initial material collection COMPLETED; Further acquisitions ONGOING**
	☑Collect in-person training materials in electronic format for later dissemination	
	☑ Record AHEC CME presentations as enduring materials	(Q3) Test with Handler-Hypertension materials (Q4) Recorded 3 training sessions
	☑ CME programs offered online at http://scahec.net/schools/library.html	(Q3-4) To access CME online, go to: http://scahec.net/schools/library.html
	E. The success of the CME will be evaluated by assessing changes in knowledge, behavior and outcomes	**Initial assessment COMPLETED; Further assessment ONGOING**
	1. Begin development of assessment materials (e.g. program evaluations) and processes	(Q3) Begin development; (Q4) Continue development; examine preliminary mater

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NEW	**EDUCATE THE NEXT GENERATION**	**Initial mentoring COMPLETED; Further mentoring ONGOING**
	Individuals mentored by the SSRI Team Leaders	
	* Dr Tanya Turan: KL2 Scholars Application (Awarded 11/2010)	Adams
	* Andrea Boan, PhD candidate: Factors associated with stroke and stroke prevention	Lackland; **Appx 16: ASH Poster**
	* Guillermo De Angula, MSCR: Blood Pressure associated with Sickle Cell Patients	Lackland
	* Jordan Magarik: Imaging and prediction of stroke outcomes	Lackland; **Appx 17: ASH Poster**
	* Thomas Miller, Summer research - medical student: Hypertension in the emergency room; Free clinic	Lackland
	* Robert Bryant, Summer research - medical student: Diabetes in the emergency room; Free clinic	Lackland
	* Andrew Gundran, Summer undergraduate research program: Atrial fibrillation treatment and risk reduction	Lackland
	* Gabriela Keeton, Summer undergraduate research program: Stroke associated pneumonia	Lackland
	IV. SE-VIEW Data Repository: ***Develop Epidemiology Profiles and maintain overa***	
	A. Determine Region(s) of Interest (ROIs)	COMPLETED
	1. Primary ROIs grouped by county into 3 regions: (1) I-95 Corridor; (2) Coastal Carolina; (3) Midlands/Upstate	**Appx12: SEVIEW Regions of Interest (ROI)**
	2. Begin collecting initial disparities data to determine ROI	
	a. Examine initial disparities data and discussed data sets	
	b. Begin collecting overall disparities dataset	Lackland & his group designated as SEV data resource
	c. Begin to standardize data to create the initial SE-VIEW Epidemiology Profile	Team begins to development of an Epidemiology Profile
	d. Present initial findings at SE-VIEW PI Meeting	(Q2) Andrea/Jordan presented at Nov 4th SEVIEW meeting; **Appx 14: Epidemiology Profile**
	B. Acquire and maintain emergency room & hospital databases pertinent to SE-VIEW projects	**Initial data requests COMPLETED; Data collection PENDING; Further collection ONGOING**
	1. Obtain and maintain hospitalized ED data (Jan 1996 – 2009)	(Q1) Received; (Q2-4) Update/maintain on an ongoing based (Boan/Lackland)
	2. Obtain and maintain NEMSIS II emergency database from DHEC	PENDING DHEC approval/release (Jauch)
	3. Obtain and maintain ORS patient database	Linked set PENDING TATRC APPROVAL (Q4) Un-linked dataset obtained (Bo
	C. Acquire and maintain socio-economic status (SES) data sets pertinent to SE-VIEW	**Initial assessment COMPLETED; Further assessment ONGOING** Boan/Kazley/Ellis
	1. Order data set(s)	(Q4) Census data available in April 2011
	2. Design initial SES analyses	
	3. Refine initial SE-VIEW SES Analysis and report findings	
	D. Analyze and report data; utilize the three ROIs	**Initial assessment COMPLETED; Further assessment ONGOING** (Boan)
	1. Refine SE-VIEW Epidemiology Profile	(Q3-4) Ongoing review/update of data
	2. Provide data to the SE VIEW cores	(Q2) Reported at Nov SEVIEW Meeting; **Appx 14: Epidemiology Profile prese**
	V. IRB/ORS: ***Develop study designs, protocols and data requests for review/approva***	
	A. Initial IRB/TATRC Submissions	**Initial protocol COMPLETED; Approval PENDING TATRC review; Other submissions AS NEEDED** (Peterson)
	1. Submit first study protocol for initial IRB approval	(Q2) Submitted for MUSC IRB approval

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	2. Address any IRB issues and receive IRB approval	(Q3) Received MUSC approval; one of 1st submitted for TATRC approval; Followed-up with TATRC (Q4) Waiting for TATRC approval
	3. Submit/receive TATRC approval	***** WAITING FOR TATRC APPROVAL *****
	4. Begin implementation of first research study protocol	(Q4) Approval Pending
	VI. Stroke Care: REACH-MUSC Telestroke Program: ***Improve access to care***	
	A. Site Expansion: *Expand geographic access to Stroke Care by adding new REACH sites*	**Annual expansion goal COMPLETED; Further expansion AS NEEDED** **Appx10: REACH MUSC Telemedicine Network**
	#10. McLeod Medical Center in Dillon (Dillon/Dillon County)	Go-Live = 07/29/2010
	#11. Springs Memorial (Lancaster/Lancaster County)	Go-Live = 10/26/2010
	#12. Carolina Pines Regional Medical Center (Hartsville/Darlington Co)	Go-Live = 1/21/2011
	#13. Self Regional Healthcare (Greenwood/Greenwood County)	Go-Live = 03/02/2011
	#14. Loris Community Hospital (Loris/Horry County)	Go-Live = 02/28/2011
	#15. Seacoast Medical Center (Little River/Horry County)	Go-Live = 02/28/2011
	B. Program Expansion: *Collaborate & examine feasibility to expand access to other specialties using REACH technologies*	**Initial collaborations COMPLETED; Further explorations AS NEEDED**
	1. MUSC CREST (Sepsis & Trauma) Program	**Initial CREST program implementation COMPLETED; Further collaboration ONGOING**
	* Held regular coordinating/collaborating sessions	(Q2-4) Lynn & Laura met/collaborated regularly (in-person &/or tele)
	* Attended training at Williamsburg; the first combination REACH/CREST site	(Q3) March 2d Sepsis Training
	2. MUSC Cancer Program (cancer telemedicine)	COMPLETED
	3. MUSC Alzheimer's program	COMPLETED (**Tele-Alzheimer's needs are not compatible with REACH technologies**)
	* Telemedicine for Alzheimer's consultations	(Q4) Met new Alzheimers team & shared materials for our different systems
	4. Primary Care setting	**Initial assessment COMPLETED; Further assessment ONGOING**
	a. Begin to develop a model for expansion into primary care	(Q2) Began
	5. Provide consultative services for those interested in telemedicine applications	**Initialconsultatioons COMPLETED; Further consultations AS NEEDED**
	* Telemedicine for nursing home consultations	COMPLETED (Q3: Met/Advised Dr Axon; NH not compatible with REACH technologies)
	C. Patient Care/Follow-up:	**Initial activites COMPLETED; Further efforts ONGOING**
	1. Physician Portal: *Allow referring physicians access to EMR via ECareNet portal*	COMPLETED; **Expand to other providers AS NEEDED**
	a. Investigated use of Physician Portal to improve continuity of care	COMPLETED
	b. Begin to introduce Physician Portal to new REACH spoke hospitals	(Q2) Presentation added to CME Program & presented at 1st site; (Q3) Presented at 3 trainings
	c. Begin to introduce Physician Portal to existing REACH spoke hospitals.	Q4) MUSC Physician Liaison to offer to existing sites and will install pending local providers' request
NEW	**2. TELL THE STORY:** ***Document qualitative patient care information***	**Initial collection COMPLETED; Further collection ONGOING** (Hilbert/Barber)
	a. Develop audio-video presentation (DVD) containing patient stories and incorporation into staff presentations as appropriate	**Appx 11: Story/Videos** (Q4) DVD used in Young Stroke presentation
	b. Continue collection/dissemination of patient stories, as appropriate	**ONGOING**

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Appendix 17

FY2011 Research Protocol with Appendices

Principal Investigators:

Robert J Adams, MS, MD
Dan Lackland, DrPH

Study Title:

Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW) - Stroke and Stroke Risk Reduction Initiative

Specific Aims:

1. Define and characterize the geographical Area of Primary Interest (AOI) for this project. This research project will target 3 areas, the I 95 corridor,coastal region and the rest of the state of South Carolina (see attached map)
2. Benchmark where we are now in areas with and without REACH stroke care. valuate the impact of telemedicine based facilitation of acute stroke care on racial disparities in the geographic areas of interest with regard to :
    a. Access to expert care
    b. Awareness of acute stroke symptoms
    c. Awareness of appropriate response to stroke and attititudes regarding treatment
    d. Use of tpa in the geographical regions of interest
    e. Onset to door time

Background and Significance:

Recent advances in medicine have led to significant improvements in the overall health status of Americans, yet members of racial, ethnic and socioeconomic minority groups continue to lag behind in health status and access to care. South Carolina and many other states in the southeast share a disproportionate burden of chronic maladies - such as diabetes mellitus, hypertension, many types of cancer, metabolic syndrome and periodontal disease. Ethnic and socioeconomic disparities amplify the prevalence and complications associated with these diagnoses.

The Medical Univeristy of South Carolina (MUSC) plans to address these burdens in South Carolina, and ultimately other states in the Southeast, by establishing the Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW). SE VIEW investigators will implement a series of community-based research and service outreach programs designed to reduce the burden of health disparities in these ways:

1. Increase awareness of the underlying causes of chronic diseases in the region by establishing education programs, with particular focus on young people
2. Establish a preventative medicine, health and wellness program to reduce health disparities
3. Develop community-based services, partnerships and outreach programs

4. CVD and Stroke. According to the CDC, the leading cause of death in the United States is CVD accounting for approximately 26% of deaths in 2006 (REF), with South Carolina residents at an even greater risk. Figure 1 shows the age-adjusted mortality rates for ischemic heart disease in SC by county from 1999-2005. CVD mortality rates are 1.3 times higher for African Americans than Caucasians. African American males are at particular risk for premature mortality associated with CVD, with almost 50% of deaths prior to 65 years of age being attributed to CVD. We are located in what is referred to as the "buckle" of the stroke belt, an area in which stroke mortality is twice as high as the national average. This problem is magnified in that African Americans experience a 40% higher mortality rate due to stroke compared to Caucasians (10-13). Also, strokes occur more frequently in younger persons in the SE VIEW region than in other parts of the United States, which leads to greater healthcare costs, lost productivity, and reduced military ready personnel. As an example, a 45-year old African American man in South Carolina has the stroke risk of a 55-year old Caucasian man in South Carolina and a 65-year old man in Minnesota. In a 2006 analysis of ischemic stroke patients (DRG 559) from a ten-county area surrounding Charleston, the number of ischemic strokes was almost 2,000 and the fraction treated with alteplase (a.k.a. tPA) was only 1.5 percent; very low by any end-measure. There remain a sizable disproportionate number of strokes in people under the age of 65. This incidence is further compounded by the marked racial disparity in the cases of all strokes and especially intracerebral hemorrhage in the 45-54 year old age group. The most recent review of data from the South Carolina Office of Research and Statistics shows a 4.5-times increase in hospitalization rates for intracerebral hemorrhage among African Americans in the 45-54 year old age group.

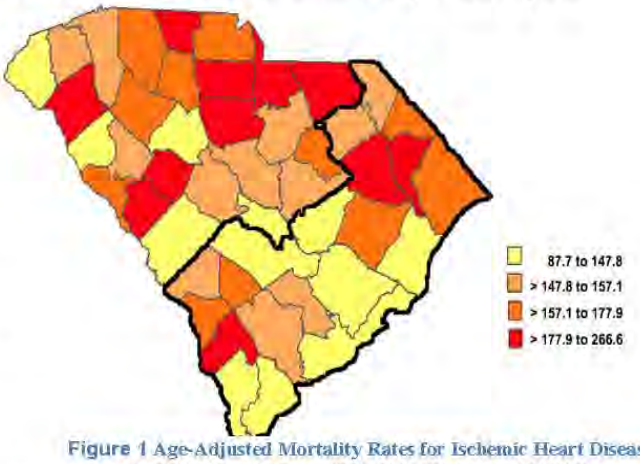

Figure 1 Age-Adjusted Mortality Rates for Ischemic Heart Disease in SC by County from 1999-2005 (Rates per 100,000)
WONDER On-line Database, compiled from Compressed Mortality File 1999-2005 Series 20 No. 2K, 2008. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Aug 8, 2008 4:27:26 PM

Significance Related to Cardiovascular Disease and Stroke

While South Carolina is commonly referred to as the "Buckle of the Stroke Belt," there are only five JCAHO certified Primary Stroke Centers in the state, three of which are in the Charleston area. There is a pronounced lack of stroke specialists in the state and the majority of those who do practice here are concentrated in two or three urban areas. Access to local resources and centralized specialty care via telemedicine will lead to a reduction of risk factors and improved management of existing disease and translate into better outcomes, reduced disparity in access and healthier lives for active duty personnel and veterans. The SE VIEW project aims to test and implement model telemedicine programs that are applicable to military medicine and to specialized healthcare.

Preliminary Studies:

Initiative Leadership
Robert J. Adams, MS, MD is a Professor of Neuroscience, Director of the MUSC Stroke Center, Director of the South Carolina Stroke Center of Economic Excellence (COEE), and will serve as the Stroke Risk Reduction Initiative Director. He has direct experience in taking methodologic innovations from concept to front-line implementation, producing fundamental changes in clinical practice and health outcomes. Dr. Adams led the development and implementation of an innovative telemedicine system for the acute treatment of stroke in rural settings (REACHCall). He developed and executed Phase I and II background studies for a novel approach to stroke prevention in children with sickle cell anemia and designed and implemented two international randomized, controlled Phase III trials (STOP and STOP II). He is currently funded by the NIH National Heart, Lung and Blood Institute and National Institute of Neurological Disorders and Stroke.

Daniel T. Lackland, DrPH is a Professor of Epidemiology in the Department of Medicine, Chair of the Diabetes Initiative of South Carolina, and will serve as the Stroke Risk Reduction Initiative Co-Director. Dr. Lackland was appointed in 2008 to the NHLBI Global Risk Assessment Workgroup, and the JNC-8 High Blood Pressure Guidelines Committee. He is the past-chairman of the South Carolina Stroke Task Force. His work focuses on the factors associated with the racial disparity in disease, and the geographic patterns of disease. He is the Principal Investigator of the NIH Heart, Lung and Blood Institute Black Pooling Project, and Investigator for a Department of Energy study assessing former workers and populations of the DOE Savannah River Site.

The Stroke and Stroke Risk Reduction Initiative
In August of 2007, the MUSC Stroke Center was formed with the intention to extend expert care from the academic center at MUSC into the Lowcountry and Pee Dee regions of South Carolina. These are areas with extremely high stroke rates; rates in which there are currently very little treatment of stroke. During his tenure at the Medical College of Georgia (MCG) prior to coming to MUSC, Dr. Robert Adams was a valued member of the MCG team that developed the REACH Tele-Stroke System. Based upon this experience, he is spearheading development and implementation of the REACH MUSC Tele-Stroke Program.

REACH Overview
REACH (Remote Evaluation of Acute IsCHemic Stroke) is a web-based, telemedicine system through which urgent, specialized stroke consultations are delivered to physicians and nurses caring for acute stroke patients in rural/community emergency departments near a stroke specialty center (known as a "hub"), such as the Medical University of South Carolina (MUSC). These rural/community sites, (referred to as "spokes,") often receive stroke patients, but have no neurologists or do not have sufficient coverage to create a 24/7 stroke team capable of rapid evaluation of patients for alteplase (tPA) treatment; the only approved treatment for stroke. The need for REACH is driven by two realities:

1. Consideration for use of alteplase (tPA) for acute ischemic stroke, and its proper administration where appropriate, has become the standard of care applied broadly to sites with emergency departments (EDs) that receive acute stroke, even if there is no local infrastructure at these facilities; a very relevant issue from a medical-legal perspective.
2. The strict 180-minute window for evaluation and treatment means that, in almost all cases, if the site that first receives the patient cannot give alteplase (tPA) rapidly and according to protocol, the patient will not get it or may be harmed if they do.

REACHMUSC has partnered with hospitals in Georgetown, Murrells Inlet, Florence, Myrtle Beach, Marion, Williamsburg, Hardeeville, Rock Hill, Camden, Dillon, and Lancaster to provide acute stroke care. The emergency departments of these 11 communities see almost 400,000 patients per year. As of October 25, 2010 over 725 consults have been completed and 175 patients have been treated with alteplase (tPA). The REACH MUSC On-Call Team consists of 8 stroke specialists, (seven neurologists and one ED physician) that are available 24 hours a day to answer the calls from the spoke ED doctors. The potential to influence change in the way rural South Carolinians receive preventative, chronic and acute healthcare will be enhanced by the formation of this collaboration of specialists with a focus on risk factor and disease management through the creation of this core facility.

REACH Process
A REACH stroke consult involves placing a cart, with a computer and camera, in the ED and requires:

- Rapid triage of suspected stroke at the remote site (spoke), the hub (MUSC) provides training and alteplase (tPA) treatment protocols;
- Contact MUSCto access an on-call stroke consultant;
- Rapid non-contrast brain CT: Must be DICOM compatible so that the scan can be uploaded to the system-server and accessed by the on-call stroke specialist;
- Input of key patient information into the REACH website;
- On-call stroke specialist accesses a secure website to view the patient, record key aspects of the exam, evaluate CT for contraindications to alteplase, and to record a recommendation for/against alteplase usage;
- After one hour transfusion of alteplase or, if no alteplase is given for any reason, transfer to the Stroke Center at MUSC is offered.

Through SE VIEW, the REACH system will be enhanced to accomplish the following goals:

1. Earlier identification and management of young and rural patients with hypertension whose eligibility for or fitness for service during military duty would otherwise be adversely affected
2. Reduction in costly "downstream" stroke and other vascular diseases affecting service capability or costs after active duty
3. Reduction in morbidity and mortality of elderly relatives of military service personnel with attendant reduction in concerns that may otherwise adversely affect deployed active duty personnel or discourage reenlistment.
4. Further enhance military related uses of telemedicine

Research Design and Methods:

We are seeking approval for the following activities:

1. Define the target counties by using information available on the internet. No specific patient information is required. We will also identify the hospitals within the area of interest.
2. Evaluate access to expert stroke care before and after implementation of the internet based telemedicine program that is a clinical consult provided to the Emergency Departments of South Carolina hospitals that join the network (REACH MUSC). This will be done using 2000 and 2010 Census data with Geographic Information Systems (GIS) to estimate by zip codes which South

Carolina residents live within 30 and 60 minutes of a primary stroke center or REACH site. No patient or individual level information will be used. The census population estimates will also allow us to determine the number and % of South Carolinians with access to a PSC or REACH site based on gender, age, race, and poverty level.

3. After approval from the REACH MUSC hospitals where the REACH consults occurred we will survey them using the survey located in appendix 1. This survey is intended to obtain information on the patients recognition and response to the symptoms which led to their REACH consult. The specifics of how the survey will be conducted are included in the human subjects section. We will assess specifically the level of stroke pertinent knowledge and recollection of stroke education (if any) among survivors of stroke treated via REACH at hospitals within the regions of interest. We are seeking approval to contact and survey the patients that had a REACH MUSC stroke consult from May 1, 2008 to present. The hospitals included as REACH MUSCspokes are: Georgetown Memorial Hospital, Grand Strand Regional Medical Center, Marion County Medical Center, McLeod Regional Medical Center, Waccamaw Community Hospital, Williamsburg Regional Hospital, Coastal Carolina Hospital, Piedmont Medical Center, Kershaw Medical Center, McLeod Medical Center, Dillon, Springs Memorial Hospital, Carolina Pines Regional Medical Center, and Loris Healthcare System.

4. Obtain benchmark information on the behavior of patients in the AOI toward use of 911 services and the overall appreciation of the urgency of stroke. We plan to do this by obtaining the EMS "run sheet" on all REACH patients that used EMS from the Nemsis II electronic system in South Carolina We will first determine the fraction of patients who used 911 by reviewing how many run sheets can be located from the REACH roster. Those without a run sheet will be assumed to have arrived by private car or other means. Next we will exam the run sheets to determine the fraction that were dispatched as a stroke. We will exam the run sheets to estimate the time interval from the onset of symptoms to the activation of 911. Additionally, we will request approval from our REACH sites to look at discharge diagnosis as well as pertinent triage information.

5. We want to compare use of thrombolytics among non REACH sites with those that have had REACH for at least 12 months. We will obtain from ORS two data sets, strokes from REACH and non REACH hospitals during comparable period and compare the use of tPA between the two groups.

Protection of Human Subjects:
Human Subject Involvement

(Numbers refer to method on pgs 4, 5 & 6)

Benchmark Metrics:

(1,2,4,5) Subject involvement will be limited to the collection of demographic, behavioral and medical history data. All methods of data collection will be obtained from pre-existing medical claims records and from the reports of selected emergency response personnel. There is no

increased risk to the patient and no biological samples will be collected. We will gain REACH site approval prior to any data collection.

Patient Survey:

(3) Surveys will consist of non-judgmental questions about the health status of the participants', the burden on the patient is minimal in that the requests will consist of a mailed introduction letter, a phone questionnaire and existing MUSC medical record review specifically to obtain the subjects' first and last name, date of birth, date of admissions, date of discharge, discharge diagnosis, race/ethnicity, gender, age at time of discharge, vital status at time of discharge, and last known address and telephone number. Non-threatening social and economical characteristics will be obtained through a confidential self-report. There is no increased risk to the patient as a study participant as no biological samples will be collected. All willing and consenting participants will be included in the follow-up study analyses.

Prior to the telephone interview a letter of introduction will be sent to the subjects' last known address. The letter will explain why they were chosen for the study, the purpose and importance of the study, what is required of them to participate, explanations of the types of questions that will be asked, and the information on declining to participate. The letter will also indicate that a proxy may used to assist with the responses to the survey. The participant who will receive the letter will be asked to share the letter with the proxy. The letter of introduction will state very clearly that their participation in the study is not mandatory but is purely voluntary and will in no way affect their medical treatment. The letter of introduction is provided in Appendix I. The letter will inform the subject or their proxy that if they wish not to participate in the telephone interview or if the subject is deceased to call "Mr./Ms. XXXXXXX" at the provided phone number of "843-792-XXXX". The letter explains that the subject (or proxy) will either speak to Mr./Ms. X directly or will be prompted to leave a voicemail in the case of a non-answered call attempt. If the subject /proxy is calling to decline participation, no inquiry will be made as to why they are selecting to not participate. The only information that will be collected is the subject's first and last name and date of birth. This information will only be used to verify the correct subject in the cohort to ensure that a call not be made to the subject's residence. If a proxy is calling to inform us that the subject is deceased, again the first and last name and date of birth will be recorded for verification purposes. All subjects who call the telephone number prior to the initiation of the interviews will be removed from the follow up study.

Those who do not call to decline participation will be contacted by telephone. Non-threatening social and economical characteristics will be obtained through a confidential self-report (or proxy where appropriate). The interview will consist of non-judgmental questions to assess the subject's perception of their REACH encounter. This will include questions concerning their stroke profile and related events and medical history such as smoking, diabetes, hypertension, and cholesterol; as well as demographic profiles to include date of birth, race/ethnicity, gender, and vital status. A medical care profile will include information about the subject's history of the stroke event, timeline of symptom to seeking treatment, and what symptoms were experienced.. The survey tool is a questionnaire and the telephone interview will be conducted by research staff at the MUSC Stroke Center, under the direction of Robert Adams, MS, MD. All willing and consenting participants from the REACH MUSC telestroke consults will be included. The MUSC Stroke Center staff have experience in handling confidential material, have been trained in human subjects protection, and are HIPAA compliant.

For the call, if a proxy is needed due to disability, the proxy will be asked if they are aware of the letter of introduction to the study. (It would be reasonable if the person were handling the affairs of the participant, they would be aware of the letter) If they are aware of the letter, and they

were identified as the proxy, and willing to do the interview, the interview will proceed accordingly. If they are not aware of the letter or study then:

- They can refuse to participate during the call
- If the proxy would like more information before agreeing, the letter originally sent would be resent to the attention of the proxy, with the interview attempted after the letter was received by the proxy. Again they would have the same opportunities to refuse participation either by
    - calling Mr/Ms. XXXX after receipt of the letter or
    - refusing to participate when the interview call is made.
- If the family member reports that the patient is too ill to participate in the call, we can ask if the family member could "assist in answering the questions while the patient remains on another phone." The patient's participation in the call would assure their consent. This should be valid even if the patient can only participate passively in the beginning of the call.

Inclusion of Minorities

The proposed study will include all subjects that received a REACH consult between July 1, 2008 and the date of approval of this proposal. The expected enrollment of non-white subjects is approximately 34% compared to the expected number of white subjects 67%. These estimates are based on the data collected from the REACH patient roster.

Inclusion of vulnerable population

The average age of stroke in SC is approximately 69 with the average age being 66 for the REACH MUSC stroke cohort. Stroke is also associated with many physical and mental disabilities post stroke event. Thus it is essential that we include the elderly aged and possible cognitively impaired subjects in the study. All precautions will be made to safeguard these individuals by using proxy interviewees when needed and to include non-judgmental questions about the health status of the participants' to maintain minimal burden to the subject.

Source and Protection of Data

(Numbers refer to method on pgs 4, 5 & 6)

(2, 4, 5.) All information that leaves the clinical centers will be de identified. The subjects included had a REACH MUSC consult between May 2008-present. A data request will be submitted to ORS and they will send the results in SAS format files. Data will be stored on MUSC OCIO server after identifiers have been removed. All data will be stored securely and accessed from the web using standard SSL protocols. Strong encryption will be used for the offline data. Additionally, we will utilize the data collected within our REACH MUSC database (PRO#). Reporting and publication of data will not include any PHI.

*(3)*Surveys will be entered directly into a REDCap database. REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies, providing: 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources. The data will be collected using RedCAP and stored in a MySQL database. All data will be stored securely and accessed from the web using standard SSL protocols. Subjects will be made fully aware that participation in the study is not required and will in no way hinder their medical care received at MUSC or other medical centers. Information of the possible subjects'

current address and telephone number will be obtained through hospital medical claims records. Prior to contacting the subjects, a letter of introduction will be mailed to the subjects' residence. The letter will include a summary about the study and will request that the subject (or appropriate proxy) contact the number provided if the subject wishes to not participate in the study. If a subject does not call the number then a phone call will be made to the residence, at which time we will explain the study and obtain verbal consent to participate. This process allows the participants two methods at two separate times to decline to participate in the study; and the participant can repudiate consent at any time during the interview. We request waiver of written consent for this study. Verbal consent will come from the subject or from an appropriate proxy (i.e. spouse, child, or care-taker of the subject) if needed. We will also ask the subjects who agree to participate in the survey if they would be willing to be contacted in the future for participation in other research related to their REACH consult or resulting hospitalization. All information that leaves the clinical centers will be de identified.

Protection Against Risk

Neither name nor date of birth will be used on any data collection forms. A unique study ID will be used. For the survey, a master list of the subjects contacted will be stored in a locked drawer in Stroke Center at MUSC and will be destroyed after analysis. In addition, only study personnel at the local site will have access to subject information or contact information for data collection purposes only. Identifying information will never be used in any data reports. Prior to participation, each person involved in the conduct of this study will be required to show documentation of completion of appropriate Human Subjects training. The PI, Co-Investigators, and Interviewers are trained in subject confidentiality and ethical conduct of research. All investigators and interviewers are HIPAA qualified. Interview data will be collected by telephone and the answers are directly entered into the REDCap database. While the interviewers will know the names of the respondents the computer-readable data files that are produced as part of this study will contain no information such as name or telephone number that would allow subjects to be identified directly. This study involves very minimal risk that includes loss of confidentiality if the subjects' medical records or survey results were to be compromised due to computer network security failure or the unlawful opening of mail documents not addressed to the offender.

Potential Benefits of Proposed Research

There are no direct benefits to the subjects or others; however, we anticipate the results from this study could be used to establish the need for improved recognition and treatment of acute stroke. In addition, hospital discharge system provides a valuable resource to monitor stroke patterns and risk factors and provides an opportunity for aggressive treatment of this at-risk population.

Important of Knowledge to be Gained

The results of this study will allow the assessment of care of acute stroke within the AOI, which will be used to aid providers and policymakers in regards to improved stroke care, recommendations on treatment practices, and protocols. These results will be used with analyses of other data bases to assess secondary stroke prevention practices in South Carolina with policy and practice recommendations.

References/Literature Citations:

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- Paul A. Harris, Robert Taylor, Robert Thielke, Jonathon Payne, Nathaniel Gonzalez, Jose G. Conde, Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support, J Biomed Inform. 2009 Apr;42(2):377-81.

FACILITIES

LABORATORY – Not applicable

CLINICAL

This project does **not** involve direct clinical care. The **MUSC Medical Center** is fully accredited by JCAHO and fully licensed by the South Carolina Department of Health and Environmental Control. It currently operates 689 beds in five inpatient facilities: Medical University Hospital (MUH), Ashley River Tower, MUSC Children's Hospital, Storm Eye Institute, and the Institute of Psychiatry. Data for the year ending June 30, 2008 include:

Number of Licensed Beds	689	plus 50 Neonatal Special Care
Average Daily Census Rate	498	
Annual Admissions	33,641	
Number of Births	2,676	
Number of Outpatient Visits	883,227	
Number of Inpatient Surgical Procedures	14,106	
Number of Outpatient Surgical Procedures	7,952	

MUSC Medical Center has a comprehensive range of specialized care centers, including a JCAHO-certified **Stroke Center** directed by the Post-STOP PI, Robert Adams, MD. The Stroke Center conducts innovative clinical trials throughout the state as well as through national networks, and offers remote urgent consultations through a new Web-based system that allows virtual examination of patients and CAT scans at community medical centers across the state.

Protection of Human Subjects. The university has a federal-wide assurance for research with human subjects (FWA 00001888) and complies with federal policy governing use of human subjects. Individuals involved in human subject research at MUSC must complete the Collaborative IRB Training Initiative (CITI) offered on-line by the University of Miami (http://www.miami.edu/citireg/). An academic Institutional Review Board (IRB) reviews all human subject protocols (http://research.musc.edu/ori/irb/home.htm). The MUSC Office of Research Integrity coordinates three IRB committees involving faculty members and representatives of the business, legal, ethical, religious and civic communities. The MUSC IRB serves as the university affiliate for the Ralph H. Johnson VA Medical Center, which is accredited by the National Committee for Quality Assurance. MUSC's application to the Association for the Accreditation of Human Research Protection Programs is pending.

Compliance. The MUSC University Compliance Program ensures full compliance with all applicable policies, procedures, laws and regulations. This involves a confidential Compliance Helpline to encourage all members of the MUSC community to ask questions or voice concerns about laws and regulations on such topics as coding and billing, research integrity, professional ethics, human subjects, animal research, biological safety, conflict of interests and patient confidentiality. The program office provides compliance training, facilitates discovery of concerns, conducts appropriate investigation and resolves timely resolution of issues. This program directly assists MUSC's management at all levels in maintaining and enhancing an environment where ethics are paramount considerations in strategic and operational decisions throughout the organization.

The **South Carolina Clinical and Translational Research Institute (SCTR)** at MUSC is an NIH Roadmap Initiative designed to transform approaches to biomedical and biobehavioral research and discovery implementation statewide. The main objective is to catalyze the development of interdisciplinary research initiatives aimed at transcending conventional boundaries and accelerating the translation of science-based discoveries into improved therapies and evidence-based practice. The core of the initiative is the realization that basic, translational and clinical investigators must work together with practitioners, practice networks and industry to effect improvements in understanding disease and improving human health. While MUSC's CTSA grant application is pending, SCTR is establishing an academic home for the CTSA Program at MUSC by building on existing strengths, including the **General Clinical Research Center (GCRC)**, which has had continuous NIH support since 1970. The current award extends into 2010. .

ANIMAL – Not applicable

COMPUTER

MUSC's **Information Services Division** (http://www.musc.edu/infoservices/) manages campus-wide data and voice communication networks and other core infrastructure systems and applications. The campus data network provides 10BaseT and 100BaseT Ethernet connections to the desktop and Gig throughputs. Access to Internet 2 enables cost-effective conferencing, distance education, collaborative research and clinical applications with two-way connectivity and full-motion video. MUSC led a statewide consortium for health communications in securing an $8 million grant from the Federal Communications Commission (awarded Dec 2007) to implement a wireless broadband network to connect rural hospitals, community health centers, and local physician practices to a fiber optic network and Internet 2. The South Carolina Light Rail offers connectivity to the Southern Light Rail and National Lambda Rail high-speed networks. MUSC accesses the supercomputer at the University of South Carolina in Columbia, SC, and shares a Beowulf cluster with the College of Charleston.

OFFICE

The MUSC Stroke Center will house the project within a 3000 ft^2 office suite located on the MUSC campus. Project investigators and staff have dedicated offices, telephones, and up-to-date office technology office software. Conference telephones and videoconferencing capabilities are readily available. Well-appointed conference rooms with teleconferencing capabilities are readily available on a scheduled basis for conference calls and steering committee meetings. Support staff and standard office services are available to facilitate the project.

Appendix:

I. **Survey letter (REACH MUSC patients)**
II. **Survey (REACH MUSC patients)**
III. **Areas of Interest Map**
IV. **ORS Application for Restricted Data**

Appendix 18

REACH MUSC:
A Telemedicine Facilitated Network for Access to Urgent Stroke Treatment in SC
Medical University of South Carolina - MUSC Stroke Center

http://www.muschealth.com/stroke/reach.htm

Abby Swanson Kazley, PhD, Becky Wilkerson, MPH, Khosrow Heidari, MA, MS, MS, Edward Jauch, MD, Robert Adams, MD, MS

INTRODUCTION

What is REACH MUSC?

Remote Evaluation of Acute IsCHemic Stroke at the Medical University of South Carolina is a partnership between S.C. rural/community hospitals and MUSC to improve patient care by providing round-the-clock expert consultations via an innovative, web-enabled telemedicine outreach solution facilitating rapid assessment of stroke patients for use of the only FDA-approved treatment, the clot-busting drug Alteplase (tPA), and for other emergent therapies.

Facts compelling development/expansion of REACH MUSC:

1. South Carolina has a very high rate of stroke
   - 3rd leading cause of death; #1 cause of disability in USA
2. Many strokes occur in smaller communities that lack expert stroke care in their nearby hospitals;
   - Most Primary Stroke Centers in S.C. are large and urban
3. Many strokes can be treated with tPA but this drug must be initiated within 3 hours after stroke (sometimes 4.5 hours).
   - Nationally, < 20% of patients arrive within 6-hours of stroke
4. The rates of tPA usage in S.C. are very low and need to be increased to lessen the burden of stroke on our state.
   - < 25% of eligible patients receive tPA; fewer in rural areas.

The purpose of this study is to measure the impact of REACH-MUSC on access to expert stroke care for South Carolinians.

METHODS

Geographic Information Systems (GIS):

- 2000 Census Data
- Drive time service areas were calculated using ESRIs® Network Analyst Extension and StreetMap for ArcMap
- 2 Analyses- Number and % of South Carolinians within 30 and 60 minutes drive time to a primary stroke center and/or REACH MUSC site
- Further examined individual age, gender, race, ethnicity, education, urban/rural residence, poverty, and stroke mortality to assess the impact on disparities in access to care

Figure 1. REACH "Hub & Spoke" System of Care

STROKE NETWORK

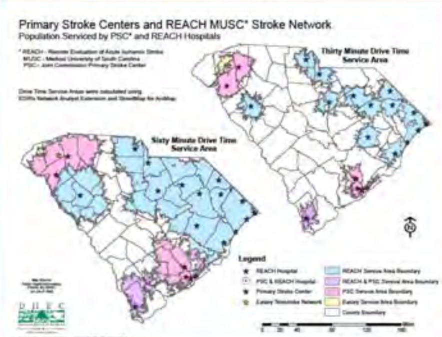


Figure 2. REACH-MUSC Stroke Network Access

REACH-MUSC has partnered with 15 hospitals since its inception in May 2008, representing 2,482 hospital beds and 471,875 annual emergency room visits; the largest with 453 beds, the smallest 25.

REACH-MUSC provided over 900 consultations through 2010.

- 50% female and 35% African American
- Average age = 66 years old; 44% were < 65 years of age!
- 23% received tPA, with an average NIHSS of 12
- 37% transferred to MUSC; 9% of transfers received advanced IA
- Most tPA recipients were discharged home (53%); only 6% expired
- Outcomes are comparable to outcomes from clinical trials of tPA.

Figure 3. Expert Stroke Care

RESULTS

Figure 4: Percent of Population with Access

Percentage of SC Population within Specified Drive Times to Primary Stroke Centers & REACH Hospitals

Population	Total	PSCs Only: 30 min No. (%)	PSCs Only: 60 min No. (%)	PSCs and REACH Hospitals: 30 min No. (%)	PSCs and REACH Hospitals: 60 min No. (%)
Total	4,012,012	975,722 (24)	1,517,487 (38)	1,725,379 (43)	3,059,919 (76)
Age (yrs)					
<40	2,291,956	575,152 (25)	880,225 (38)	997,224 (44)	1,766,629 (77)
40-49	604,348	144,329 (24)	225,891 (37)	257,321 (43)	459,339 (76)
50-64	629,650	146,424 (23)	233,870 (37)	266,954 (42)	472,912 (75)
>65	485,645	109,837 (23)	177,982 (37)	203,881 (42)	361,840 (74)
Gender					
Women	2,064,832	499,770 (24)	777,008 (38)	891,766 (43)	1,577,625 (76)
Men	1,947,380	475,953 (24)	740,459 (38)	833,613 (43)	1,482,294 (76)
Race/Ethnicity					
Black or African American (Non-Hispanic)	1,176,895	217,160 (18)	347,506 (30)	443,892 (38)	890,083 (76)
Hispanic	92,829	28,846 (31)	40,004 (43)	42,268 (46)	70,369 (76)
White (Non-Hispanic)	2,654,401	702,590 (26)	1,090,708 (41)	1,197,245 (45)	2,027,180 (76)
Other (Non-Hispanic)	87,898	27,307 (31)	38,951 (44)	41,874 (48)	72,308 (82)
Education (≥25 yrs old)					
<High School	614,279	130,288 (21)	227,973 (37)	253,414 (41)	468,816 (76)
High School Graduate	778,054	174,024 (22)	286,499 (37)	327,383 (42)	587,588 (76)
>High School	1,203,677	321,147 (27)	463,990 (39)	532,420 (44)	914,653 (76)
Urban/Rural*					
Urban	2,427,021	818,815 (34)	1,068,151 (44)	1,247,876 (51)	1,981,252 (82)
Rural	1,584,991	156,907 (10)	449,316 (28)	477,503 (30)	1,078,667 (68)
Poverty (for whom poverty status is determined)					
In poverty	547,669	117,861 (21)	190,469 (35)	227,475 (42)	418,091 (76)
At or above poverty	3,335,460	827,915 (25)	1,280,439 (38)	1,450,832 (43)	2,541,431 (76)
Stroke Mortality (2000 - 2006)	9,577	1,946 (20)	3,098 (32)	3,745 (39)	6,278 (66)

PSC = Joint Commission Primary Stroke Center
REACH = Remote Evaluation of Acute Ischemic Stroke
*US Census definition: Urban includes Urban Areas and Urban Clusters, Rural includes all else.
Note: All data except mortality data are based on Census 2000 numbers.

CONCLUSIONS

tPA usage rates in S.C. were very low before REACH-MUSC:

- 1 year before REACH, tPA was used 12 times at the 1st 6 sites
- 1 year afterwards, tPA was used 56 times; 4.6 fold increase!

Access to expert stroke care for S.C. was low before REACH:

- With REACH, 76% of South Carolinians are now within a 60 minute drive of tPA treatment compared with only 38% prior.
- % increase in access was highest for groups that generally face disparities related to age, race, gender, education, rural location, poverty

SE VIEW Acknowledgement: This research and development project was conducted by the Medical University of South Carolina and is made possible by a cooperative agreement that was awarded and administered by the U.S. Army Medical Research and Materiel Command (USAMRMC) and the Telemedicine & Advanced Technology Research Center (TATRC), Fort Detrick, Maryland 21702, under Contract Number: W81XWH-10-2-0057

Appendix 19

To: SC DHEC Data Request Committee

From : Edward C. Jauch, MD MS
On behalf of the SE VIEW Stroke Research Subcommittee

SC DHEC Data Request Committee,

The SE VIEW Research Project is a large multiyear award from the Department of Defense to MUSC. Among the many subprojects within this overall award is a program to investigate health care disparities related to stroke and access to stroke care. We have decided to start our investigation focusing on an area within SC with the highest incidence and mortality rates. To better understand stroke patient demographics and utilization of 911 and prehospital services we are requesting access to data collected in the SC NEMSIS II database. The specific data elements requested are shown in the table below. One of our first analyses will largely be descriptive in nature but later efforts will ideally link NEMSIS II data elements with hospital data in ORS. This will provide a more detailed understanding of patient routing and flow, and provide some understanding how this impacts clinical outcomes. Our long term goal is to work with healthcare providers in this region (911, EMS, hospitals) to better identify, assess, and treat patients with acute stroke. All NEMSIS II data provided will be maintained in a secure environment and no data will be shared with other entities.

On behalf of the SE VIEW investigators, we appreciate your assistance with this project. If you have any questions regarding this request please feel free to contact me.

Best regards,

Edward C. Jauch, MD MS, FAHA FACEP
Professor, Research Director
Division of Emergency Medicine & Department of Neurosciences
Medical University of South Carolina
169 Ashley Avenue, MSC 300
Charleston, SC 29425
843-792-5058 office
jauch@musc.edu
Assistant: Karen Murphy murphk@musc.edu

DHEC Data Request

Date: November 25, 2010

To: Victor Grimes
DHEC Data Program Coordinator, SC DHEC Division of EMS

Dear Victor,

As we discussed several weeks ago, the MUSC SE VIEW (Southeastern Virtual Institute for Health Equity and Wellness) Project is a new collaboration between the Department of Defense and MUSC. In part the SE VIEW investigators will implement a series of community-based research and service outreach programs designed to reduce the burden of health disparities, with stroke being one of the focuses. Particular to stroke, we are conducting preliminary research related to health disparities and access to care for acute ischemic stroke, primarily in the I-95 corridor. Below is our request for information and data from within the NEMSIS II database t support this effort. As we talked about last month this request support I recognize this is the first such request so if you or the data committee require further clarification please let me know. Thank you for your support.

Best regards,

Ed

Time period of study: January 1, 2010 to present
Data elements requested:

Patient identifiers:
Patient name
Medical record #
Date of birth
Age
Gender
Arrival date
Admit date
Arrival mode
Insurance
Discharge date
ICD-9

Prehospital information:
Date and time
Service requested
Response urgency
Event location
Crew info
Delays data
Date and times data
Transport distance
Crew info
Chief complaint
Provider's impression
Vital signs
Baseline GCS
Baseline stroke scale
Thrombolytic screen
Neurological assessment
Destination
Prehospital contact
Reason for choosing destination
ED disposition
Hospital disposition
Last normal time

Appendix 20

REACH MUSC℠
Member, REACH Stroke Network

A Telemedicine Facilitated Network for Urgent Stroke Treatment in South Carolina

Ellen Debenham, RN, CCRC
MUSC Stroke Center Clinical & Research Project Manager
REACH-MUSC Tele-Stroke Project Manager

What is REACH MUSC ?

Remote **E**valuation of **A**cute is**CH**emic stroke

- A partnership between S.C. rural/community hospitals & Medical University of S.C.
- 100% web-based service through which MUSC specialists deliver urgent consults to rural/ community emergency rooms to improve the care of acute stroke patients

MUSC Consulting Physicians

REACH-MUSC

Why Telemedicine?

- Telemedicine allows remote facilities to communicate with the HUB at MUSC to access physician experts specially trained in stroke treatment-including the use of tissue plasminogen activator (tPA)

REACH-MUSC™

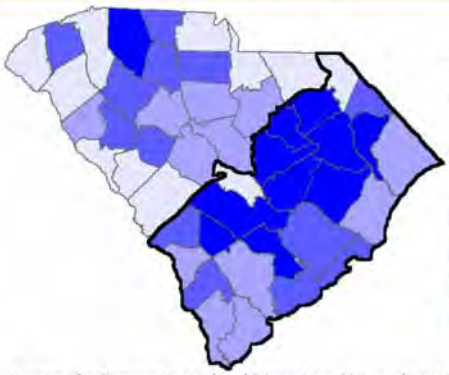
Why REACH-MUSC?

- **A robust "hub and spoke" system:**
  - Facilitates rapid assessment of stroke patients
  - Increases use of tPA and other therapies
  - Expedites late revascularization using intra-arterial re-canalization techniques (IA)
  - Enhances confidence in the remote facility
  - Enhances community stature of remote facility
  - Creates MUSC-Remote site partnerships that carry over into other areas ("halo effect")

REACH-MUSC™

Factors Driving the Development/Expansion of REACH

- South Carolina has a high rate of stroke
  - *Buckle of the Stroke Belt*
- Many occur in communities lacking stroke expertise



Age-Adjusted Mortality Rates for Stroke in SC by County from 1999-2005 (Rates per 100,000)

- 42.5 to 62.8
- > 62.8 to 72.0
- > 72.0 to 81.5
- > 81.5 to 113.9

Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2005. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2005 Series 20 No. 2K, 2008. Accessed at http://wonder.cdc.gov/cmf-icd10.html on Aug 8, 2008 4:27:26 PM

Factors Driving the Development/Expansion of REACH

- Stroke is one of the leading causes of death and the #1 cause of disability in the U.S.
- Strokes can be treated with a clot busting drug (Alteplase; tPA) but this drug must be initiated within **3 hours** (up to 4.5 hrs in some cases).
- Nationally, less than half of patients arrive within the 3-hour window; fewer in rural areas.

REACH MUSC

Video Presentation <Play DVD >

Online at: http://www.muschealth.com/video/Default.aspx?cId=37

Elizabeth Lafata - A Stroke Patient's Dramatic Story

Daughter Of A Stroke Patient Speaks About The REACH SC Program

Donna's Stroke Story

Stroke patient returns to MUSC to thank staff

REACH MUSC Stroke Program- Roberta Jordan's Story

REACH MUSC

REACH-MUSC:
Impact on tPA Usage

Rates of Alteplase (tPA) usage in South Carolina were very low pre-REACH MUSC

- In the 12 months **pre-REACH** at the first 6 REACH sites, tPA was used **12 times**
- In the first 12 months **after REACH** tPA was used 56 times— **4.6 times increase!!!**
- The treatment rate for ischemic stroke went from **0.4% to 3.5%** just with implementation of REACH-MUSC.

REACH-MUSC

REACH-MUSC:
Impact of Patient Access

- **76% of South Carolinians are now within 60-minute drive of tPA treatment compared with only 38% prior**
  - % increase highest along I-95 corridor; a predominantly rural, high disparities region of S.C.

Increase in Access to Expert Stroke Care*
for South Carolinians Through Telemedicine

Drive Time by Region	30 Minutes		60 Minutes	
Total State	749,657	**19%**	1,542,452	**33%**
Coastal Region	170,692	21%	213,327	26%
I-95 Corridor	247,144	**32%**	456,588	**58%**
Upstate/Midlands	331,821	14%	872,537	36%

*Access to "Expert Stroke Care" is defined by drive time to a Primary Stroke Center or telestroke site
For more information, contact: Medical University of S.C.; Abby Swanson Kazley, PhD (swansonaj@musc.edu)

REACH Telemedicine Protocol

- Suspected stroke patient arrives.
- Spoke ED calls MUSC for a "REACH Stroke consult"
- MUSC Consulting Physician is contacted and is connected to the Spoke ED via telephone.
- Consultant logs into the REACH secure website to access and control the REACH cart: a mobile unit composed of a computer, LCD screen, and fully adjustable camera.

REACH-MUSC™

REACH Telemedicine Protocol
(continued)

- Consultant speaks to patient and/or family, examines the patient using the NIH Stroke Scale (NIHSS) with the help of spoke nurse, views the CT scan that the site has previously uploaded to the REACH Call website, and makes a recommendation.

REACH-MUSC™

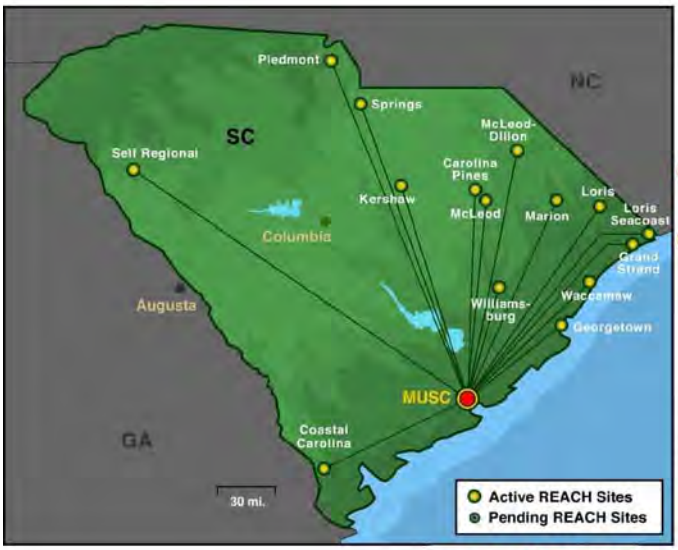
Post-Consult Protocol

- **Spoke Physician determines the appropriate course of action:**
  - "drip (tPA) and transport" *or*
  - "drip and keep (hospitalize locally)" *or*
  - "evaluate only (no tPA) and transport" *or*
  - "evaluate and keep (hospitalize locally)"

REACH-MUSC™

REACH-MUSC Network

May 2008 – Present



15 Active Spoke Hospitals

- 2,482 Hospital Beds
- 471,875 Emergency Room visits per year

Largest Hospital = 453 beds

Smallest Hospital = 25 beds

REACH-MUSC™

REACH-MUSC Data

May 1, 2008 – April 1, 2011

Total cohort = 1,085 telemedicine consults

- 51% Female
- 35% African American
- Average Age = 66 yrs; **44% were < 65 years of age!**
  - tPA recipients 27-93 years of age
- 369 (34%) transferred to MUSC
- 231 (21%) received tPA
- 28 (8%) of transfers received advanced IA; available only at MUSC
- Average NIHSS of tPA recipients = 12

REACH-MUSC

*Assessing the REACH-MUSC Stroke Program:

tPA Outcomes

- **Discharge disposition available on 231 tPA patients:**
  - ☑ **Home =54%**
  - Acute rehab = 27%
  - Nursing facility = 5%
  - Hospice or other hospital = 6%
  - Other/Unknown = 2%
  - Expired = 6%
- Conclusion: Outcomes are comparable to outcomes from clinical trials of tPA

REACH-MUSC

*** Assessment:**

- Reviewed all program consults from May 1, 2008-April 1, 2010
- Source documents reviewed including the REACH MUSC Stroke consult and either :
  - Medical record of hospitalization at site or
  - Medical record of MUSC hospitalization record in cases transferred from spoke ED to MUSC

Assessing the REACH-MUSC Stroke Program:
Hemorrhage

- **Complications in these 231 tPA recipients:**
  - Brain Hemorrhage
    - Symptomatic = 6 (2.6%)
    - Asymptomatic = 17 (7.4%)
  - No major systemic bleeds or allergic reactions were observed
- Conclusion: tPA facilitated by REACH MUSC is associated with hemorrhage rates well within accepted benchmarks.

REACH-MUSC

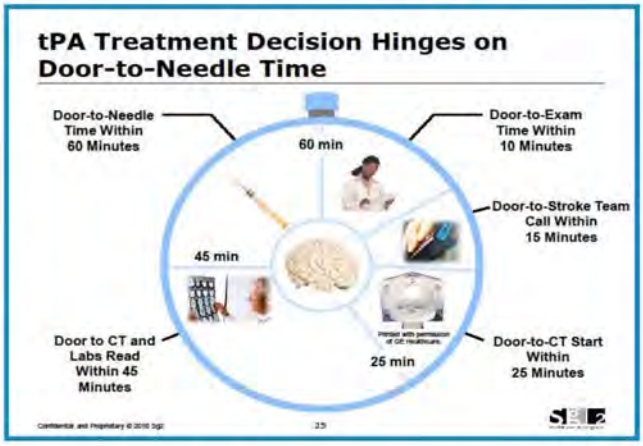
Corresponding rates from the NIH trial of tPA:*

- 6% symptomatic
- 5% asymptomatic

*N Engl J Med. 1995 Dec 14;333(24): 1581-7. Tissue plasminogen activator for acute ischemic stroke. The National Institute of Neurological Disorders and Stroke rt-PA Stroke Study Group.

Assessing Time Benchmarks:
Door-to-Needle Time

- **REACH-MUSC Door to Needle = 99 min.**
- NINDS Goal: < 60 minutes
- REACH data examined to identify:
  - Critical Times Points
  - Steps needed to shorten time



REACH-MUSC

Assessing Time Benchmarks:
Critical Time Points

REACH MUSC Critical time points:

- **Door to Consult = 52 minutes**
  - No NINDS benchmark exists
  - Our Goal: ≤ 20 minutes
  - ***Decreasing D-C is focus of our 2011 QI project***
- Consult Call to MUSC ATC to **Virtual Consultant "at bedside" = 10 minutes**
  - No NINDS benchmark exists
  - Our Goal: 10 min is very good; try for further decrease

REACH-MUSC

Future Plans

- **Collaborative Quality Improvement Projects**
  - ☑**Community Awareness**
    - **Reduce Onset-to-911-to-Door times**
  - Decrease REACH Critical Times:
    - Door-to-Consult time
    - Decision-to-Needle time
- **Stroke education for spoke & community providers**
  - Webinars
  - Tele-training via AHEC network
  - Develop research potential of this network
- **Building other services on REACH platform**
  such as CREST (sepsis and trauma care)
- **Yearly meetings with all stakeholders**
- **Insure REACH is part of the S.C. State Stroke Plan**

LITERATURE SEARCH

911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS
1	PM	2011	Stroke. 2011 May 26. [Epub ahead of print]	Community-Based Participatory Research: A New Approach to Engaging Community Members to Rapidly Call 911 for Stroke.	Skolarus LE, Zimmerman MA, Murphy J, Brown DL, Kerber KA, Bailey S, Fowlkes S, **Morgenstern LB**.
2	PM	2011	Stroke. 2011 Jun;42(6):1697-701. Epub 2011 May 5.	Understanding reasons for delay in seeking acute stroke care in an underserved urban population.	Hsia AW, Castle A, Wing JJ, Edwards DF, Brown NC, Higgins TM, Wallace JL, Koslosky SS, Gibbons MC, Sánchez BN, Fokar A, Shara N, **Morgenstern LB**, Kidwell CS.
3	PM	2010	Stroke. 2010 Sep;41(9):2026-32. Epub 2010 Aug 12.	Attitudes and beliefs of Michigan emergency physicians toward tissue plasminogen activator use in stroke: baseline survey results from the INcreasing Stroke Treatment through INteractive behavioral Change Tactic (INSTINCT) trial hospitals.	Scott PA, Xu Z, Meurer WJ, Frederiksen SM, Haan MN, Westfall MW, Kothari SU, Morgenstern LB, Kalbfleisch JD.
4	PM	2010	J Stroke Cerebrovasc Dis. 2010 Sep-Oct;19(5):370-5. Epub 2010 May 15	Impact of media on community awareness of stroke warning signs: a comparison study.	Fogle CC, Oser CS, McNamara MJ, Helgerson SD, Gohdes D, Harwell TS.
5	PM	2010	Health Promot Pract. 2010 Jan;11(1):95-103. Epub 2008 Mar 10.	Kids Identifying and Defeating Stroke (KIDS): development and implementation of a multiethnic health education intervention to increase stroke awareness among middle school students and their parents.	Mullen Conley K, Juhl Majersik J, Gonzales NR, Maddox KE, Pary JK, Brown DL, Moyé LA, Espinosa N, Grotta JC, **Morgenstern LB**.
6	G	2010	Stroke. 2010 Jul;41(7):1501-7. Epub 2010 May 13.	Lack of association between stroke symptom knowledge and intent to call 911: a population-based survey.	Fussman C, Rafferty AP, Lyon-Callo S, **Morgenstern LB**, Reeves MJ.
7	G; PM	2010	BMC Public Health, 10, 784.	Systematic review of mass media interventions designed to improve public recognition of stroke symptoms, emergency response and early treatment.	Lecouturier, J., Rodgers, H., Murtagh, M. J., White, M., Ford, G. A., & Thomson, R. G.
8	PM	2010	Am J Emerg Med. 2010 Jun;28(5):607-12. Epub 2010 Jan 28.	Which stroke symptoms prompt a 911 call? A population-based study.	Kleindorfer D, Lindsell CJ, Moomaw CJ, Alwell K, Woo D, Flaherty ML, Adeoye O, Zakaria T, Broderick JP, Kissela BM.
9	G	2009	Int J Stroke, 2009, 4(3), 187-199.	A comprehensive review of prehospital and in-hospital delay times in acute stroke care.	Evenson, K. R., Foraker, R. E., Morris, D. L., & Rosamond, W. D.
10	PM	2009	Stroke. 2009 Jun;40(6):2134-42. Epub 2009 Apr 9.	Emergency medical services-based community stroke education: pilot results from a novel approach.	Tadros A, Crocco T, Davis SM, Newman J, Mullen J, Best R, Teets A, Maxwell C, Slaughter B, Teter S.
11	PM	2009	Stroke. 2009 Dec;40(12):3845-50. Epub 2009 Oct 1.	Hospital arrival time and intravenous t-PA use in US Academic Medical Centers, 2001-2004.	Lichtman JH, Watanabe E, Allen NB, Jones SB, Dostal J, Goldstein LB.

LITERATURE SEARCH

911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS
12	PM	2009	Ethn Dis. 2009 Spring;19(2):128-34.	Racial disparities in knowledge of stroke and heart attack risk factors and warning signs among Michigan adults.	Fussman C, Rafferty AP, Reeves MJ, Zackery S, Lyon-Callo S, Anderson B.
13	G	2009	BMC Geriatrics 2009, 9:35doi:10.1186/1471-2318-9-35	Stroke awareness in the general population: knowledge of stroke risk factors and warning signs in older adults	Anne Hickey, Ann O'Hanlon, Hannah McGee, Claire Donnellan, Emer Shelley, Frances Horgan and Desmond O'Neill
14	C; PM	2009	Am J Med Sci, 2009. 337(1): p. 5-10.	Stroke recognition among individuals with stroke risk factors.	**Ellis, C.** and **L.E. Egede,**
15	PM	2008	Prev Chronic Dis. 2008 April; 5(2): A49. Published online 2008 March 15.	Addressing Stroke Signs and Symptoms Through Public Education: The Stroke Heroes Act FAST Campaign	Hilary K Wall, MPH, Brianne M Beagan, MPH, H June O'Neill, MPH, Kathleen M Foell, RD, MS, and Cynthia L Boddie-Willis, MD, MPH
16	C; PM	2008	J Neurol; 255;378-384.	An educational multi-media campaign has differential effects on public stroke knowledge and care-seeking behavior.	Marx, JJ, Nedelmann, M, Haertle B, Dieterich M, Eicke, BM. (2008).
17	PM	2008	Prev Chronic Dis. 2008 April; 5(2): A41.	Awareness of Necessity to Call 9-1-1 for Stroke Symptoms, Upstate New York	Janine M Jurkowski, PhD, MPH, Dayna M Maniccia, MS, Barbara A Dennison, MD, Steven J Samuels, PhD, and Deborah A Spicer, RD, MPH
18	G; PM	2008	Stroke. 2008 Jun;39(6):1844-9. Epub 2008 Apr 24.	Calling 911 in Response to Stroke: A Nationwide Study Assessing Definitive Individual Behavior	MikulÃ-k R, Bunt L, Hrdlicka D, Dusek L, VÃ¡clavÃ-k D, Kryza J.
19	G; PM	2008	Ann Neurol. 2008 Apr;63(4):466-72.	Care seeking after stroke symptoms	Virginia J. Howard MSPH, **Daniel T. Lackland PhD**, Judith H. Lichtman PhD, Leslie A. McClure PhD, George Howard DrPH, Libby Wagner MA, Leavonne Pulley PhD, Camilo R. Gomez MD
20	G	2008	Cerebrovasc Dis 2008;25:385-391	Changes in Knowledge of Stroke Risk Factors and Warning Signs among Michigan Adults	Mathew J. Reeves, Ann P. Rafferty, Alison A.R. Aranha, Velma Theisen
21	G	2008	Primary Health Care Research & Development (2008), 9: 136-145	Characteristics that identify Hispanic women likely to be ill informed about heart attack and stroke symptoms: an analysis of 2003–2005 Behavioral Risk Factor Surveillance Survey data	May Nawal Lutfiyya, Marites T. Cumba, Robert Bales, Carlos Aguero, Adriana Tobar, Cynthia McGrath, Shelly Brady, Julia Zaiser and Martin S. Lipsky
22	C; PM	2008	Public Health Rep, 2008b. 123(4): p. 514-22.	Ethnic disparities in stroke recognition in individuals with prior stroke.	**Ellis, C.** and **Egede, L.E.**
23	PM	2008	Stroke. 2008 Oct;39(10):2809-16. Epub 2008 Jul 17.	Hip-hop' stroke: a stroke educational program for elementary school children living in a high-risk community.	Williams O, Noble JM
24	C; PM	2008	Stroke, 2008; 39: 3262-3267.	Predictors of time from hospital arrival to initial brain-imaging among suspected stroke patients, The N.C. Collaborative Stroke Registry.	Rose, KM, Rosamund, W.D., Huston, S.L., Murphy, C.V., Tegler, C.H. (2008).

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911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS
25	PM	2008	Health Soc Care Community. 2008 Mar;16(2):165-87.	Preventing stroke: a narrative review of community interventions for improving hypertension control in black adults.	Connell P, Wolfe C, McKevitt C.
26	C; PM	2008	Stroke. 2008 Jun;39(6):1844-9. Epub 2008 Apr 24.	Public education strategies to increase awareness of stroke warning signs and the need to call 911.	Fogle, C. C., Oser, C. S., Troutman, T. P., McNamara, M., Williamson, A. P., Keller, M., McNamara, S., Helgerson, S. D., Gohdes, D., & Harwell, T. S.
27	C; PM	2008	Ethn Dis, 2008a. 18(2): p. 198-203.	Racial/ethnic differences in stroke awareness among veterans.	**Ellis, C.** and **Egede, L.E.**
28	G	2008	Stroke. 2008;39:2695.)	Strengthening the Link: The Critical Role of Children in the Stroke Chain of Recovery	Stephen M. Davis, MPA, MSW
29	PM	2008	Stroke. 2008 Aug;39(8):2331-5. Epub 2008 Jun 19.	The challenges of community-based research: the beauty shop stroke education project.	Kleindorfer D, Miller R, Sailor-Smith S, Moomaw CJ, Khoury J, Frankel M.
30	PM	2007	Stroke. 2007 Nov;38(11):2972-8. Epub 2007 Sep 20	A randomized, controlled trial to teach middle school children to recognize stroke and call 911: the kids identifying and defeating stroke project.	**Morgenstern LB**, Gonzales NR, Maddox KE, Brown DL, Karim AP, Espinosa N, Moyé LA, Pary JK, Grotta JC, Lisabeth LD, Conley KM.
31	C; PM	2007	Med Care Res Rev. 2007 Oct;64(5 Suppl):29S-100S.	Cardiovascular health disparities: A Systematic review of health care interventions.	Davis AM, Vinci L, Okwuosa, TM, Chase, AR, Huang, ES.
32	G; PM	2007	Prehosp Emerg Care. 2007 Jul-Sep;11(3):318-25.	EMS Management of Acute Stroke—Out-of-Hospital Treatment andStroke System Development (Resource Document to NAEMSP Position Statement)	Millin MG, Gullett T, Daya MR.
33	PM	2007	J Neurosci Nurs. 2007 Aug;39(4):236-42.	FAST Stroke Prevention Educational Program for Middle School Students: pilot study results	Miller ET, King KA, Miller R, Kleindorfer D.
34	PM	2007	Heart Lung. 2007 Jan-Feb;36(1):25-34.	Interpretation of symptoms and delay in seeking treatment by patients who have had a stroke: exploratory study.	Zerwic J, Hwang SY, Tucco L.
35	G; PM	2007	Ethnicity & Disease, Volume 17, Spring 2007	KIDS IDENTIFYING AND DEFEATING STROKE (KIDS): DESIGN OF A SCHOOL-BASED INTERVENTION TO IMPROVE STROKE AWARENESS	Gonzales NR, Brown DL, Maddox KE, Conley KM, Espinosa N, Pary JK, Karim AP, Moyé LA, Grotta JC, **Morgenstern LB.**
36	G; PM	2007	Stroke. 2007 Dec;38(12):3213-7. Epub 2007 Oct 25.	Population-Based Analysis of the Impact of Expanding the Time Window for Acute Stroke Treatment	Majersik JJ, Smith MA, Zahuranec DB, Sánchez BN, **Morgenstern LB.**
37	PM	2007	Acad Emerg Med. 2007 Nov;14(11): 1064-71. Epub 2007 Jul 24.	Qualitative Data Collection and Analysis Methods: The INSTINCT Trial	Meurer WJ, Frederiksen SM, Majersik JJ, Zhang L, Sandretto A, Scott PA.
38	PM	2006	Prev Med. 2006 Mar;42(3):235-9. Epub 2006 Feb 3.	Cardiovascular disease knowledge among culturally Deaf patients in Chicago.	Margellos-Anast H, Estarziau M, Kaufman G.

LITERATURE SEARCH

911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS
39	PM	2006	Stroke. 2006 Jun;37(6):1508-13. Epub 2006 May 11.	Community socioeconomic status and prehospital times in acute stroke and transient ischemic attack: do poorer patients have longer delays from 911 call to the emergency department?	Kleindorfer DO, Lindsell CJ, Broderick JP, Flaherty ML, Woo D, Ewing I, Schmit P, Moomaw C, Alwell K, Pancioli A, Jauch E, Khoury J, Miller R, Schneider A, Kissela BM.
40	G; PM	2006	Am J Prev Med. 2006 Mar;30(3):189-96.	Effect of Language on Heart Attack and Stroke Awareness Among U.S. Hispanics	DuBard CA, Garrett J, Gizlice Z.
41	G; PM	2006	Arch Neurol. 2006 May;63(5):661-4.	Reasons Why Few Patients With Acute Stroke Receive Tissue Plasminogen Activator	Bambauer KZ, Johnston SC, Bambauer DE, Zivin JA.
42	G; PM	2006	Circulation. 2006;114:168-182	Reducing Delay in Seeking Treatment by Patients With Acute Coronary Syndrome and Stroke	Moser DK, Kimble LP, Alberts MJ, Alonzo A, Croft JB, Dracup K, Evenson KR, Go AS, Hand MM, Kothari RU, Mensah GA, Morris DL, Pancioli AM, Riegel B, Zerwic JJ.
43	C; PM	2006	Circulation, 114; 168-182.	Reducing Delay in Seeking Treatment by Patients with Acute Coronary Syndrome and Stroke: A Scientific Statement from the American Heart Association Council on Cardiovascular Nursing and Stroke Council,	Moser, DK, Kimble, LP, Alberts MJ, Alonzo, A, Croft, JB, Dracup, K et al. (2006).
44	G; PM	2006	Prev Chronic Dis. 2006 Oct;3(4):A128. Epub 2006 Sep 15.	The Great Lakes Regional Stroke Network Experience	Angela Bray Hedworth, MS, CHES, RHEd and Cassidy S Smith, MPH
45	G; PM	2006	Stroke. 2006;37:963	Time to Admission in Acute Ischemic Stroke and Transient Ischemic Attack	Agyeman O, Nedeltchev K, Arnold M, Fischer U, Remonda L, Isenegger J, Schroth G, Mattle HP.
46	PM	2005	Stroke. 2005 May;36(5):1035-9. Epub 2005 Apr 7.	Development and validation of the stroke action test.	Billings-Gagliardi S, Mazor KM.
47	G; PM	2005	Tech Vasc Interv Radiol. 2005 Jun;8(2):74-80. Review.	Prehospital Care of the Acute Stroke Patient	Venkatakrishna Rajajee, MD; Jeffrey Saver, MD
48	PM	2005	Neurology. 2005 Feb 22;64(4):654-9.	Prioritizing interventions to improve rates of thrombolysis for ischemic stroke.	California Acute Stroke Pilot Registry (CASPR) Investigators.
49	C; PM	2005	Soc Work Health Care, 42(2), 73-92.	Stroke awareness among rural residents: the case of West Virginia.	Alkadry, M. G., Wilson, C., & Nicholson, D. (2005).
50	C; PM	2004	QJ Med, 97; 273-279.	Improving the efficiency of delivery of thrombolysis for acute stroke: a systematic review.	Kwan, J, Hand, P, Sandercock P. (2004).
51	PM	2004	Prev Chronic Dis. 2004 Jul;1(3):A07. Epub 2004 Jun 15.	Increasing employee awareness of the signs and symptoms of heart attack and the need to use 911 in a State Health Department.	Fogle CC, Oser CS, Blades LL, Harwell TS, Helgerson SD, Gohdes D, Spence MR, Dawson DE.
52	C; PM	2004	Stroke. 2004 May;35(5):e106-8. Epub 2004 Mar 11.	Prehospital Neuroprotective Therapy for Acute Stroke Results of the Field Administration of Stroke Therapy–Magnesium (FAST–MAG) Pilot Trial	Saver JL, Kidwell C, Eckstein M, Starkman S; FAST-MAG Pilot Trial Investigators.

LITERATURE SEARCH
911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS
53	G	2003	Stroke. 2003;34:994	Cuyahoga County Operation Stroke Speed of Emergency Department Evaluation and Compliance With National Institutes of Neurological Disorders and Stroke Time Targets	Irene L. Katzan, MD, MS; Thomas W. Graber, MD; Anthony J. Furlan, MD; Sophia Sundararajan, MD, PhD; Cathy A. Sila, MD; Gary Houser; Dennis M. Landis, MD for Cuyahoga County Operation Stroke
54	G; PM	2003	Am J Prev Med, 2003, 25(4), 315-319.	Low public recognition of major stroke symptoms.	Greenlund, K. J., Neff, L. J., Zheng, Z. J., Keenan, N. L., Giles, W. H., Ayala, C. A., Croft, J. B., & Mensah, G. A. (2003).
55	C; G; PM	2003	J Health Commun, 8(4), 369-381.	Stroke knowledge and barriers to stroke prevention among African Americans: implications for health communication.	Pratt, C. A., Ha, L., Levine, S. R., & Pratt, C. B. (2003).
56	G	2003	JAMA, 2003, 289(3), 343-346.	Trends in community knowledge of the warning signs and risk factors for stroke.	Schneider, A. T., Pancioli, A. M., Khoury, J. C., Rademacher, E., Tuchfarber, A., Miller, R., Woo, D., Kissela, B., & Broderick, J. P. (2003).
57	C; PM	2002	Neurology, 59(10), 1547-1552.	Knowledge of stroke risk factors and warning signs among Michigan adults.	Reeves, M. J., Hogan, J. G., & Rafferty, A. P. (2002).
58	G; PM	2001	Prehosp Emerg Care. 2001 Oct-Dec;5(4):335-9.	A comparison of emergency medical services times for stroke and myocardial infarction.	Evenson KR, Schroeder EB, Legare TB, Brice JH, Rosamond WD, Morris DL.
59	G; PM	2001	Stroke. 2001 Jun;32(6):1360-4.	Barriers to Acute Stroke Therapy and Stroke Prevention in Mexican Americans	**Morgenstern LB**, Steffen-Batey L, Smith MA, Moyé LA.
60	G; PM	2001	Cerebrovasc Dis, 2001, 11(1), 34-43.	Community-based education improves stroke knowledge.	Becker, K., Fruin, M., Gooding, T., Tirschwell, D., Love, P., & Mankowski, T. (2001).
61	C; PM	2001	Stroke, 32(1), 63-69.	Delay in presentation and evaluation for acute stroke: Stroke Time Registry for Outcomes Knowledge and Epidemiology (S.T.R.O.K.E.).	Lacy, C. R., Suh, D. C., Bueno, M., & Kostis, J. B. (2001).
62	G; PM	2001	J Stroke Cerebrovasc Dis. 2002 May-Aug;11(3-4):174-82	Educating north america: Lessons learned	Hickenbottom SL, **Morgenstern LB**.
63	G	2001	Neurology Today: May/June 2001 - Volume 1 - Issue 1 - pp 1,33,52	National Coalition To Refocus Efforts in Response To Brain Attacks	Henkel, Gretchen
64	G; PM	2001	Stroke. 2001 Mar;32(3):652-5.	Regional Access to Acute Ischemic Stroke Intervention	Riopelle RJ, Howse DC, Bolton C, Elson S, Groll DL, Holtom D, Brunet DG, Jackson AC, Melanson M, Weaver DF.
65	C; PM	2001	South Med J, 94(6), 613-618.	Stroke awareness among Georgia adults: epidemiology and considerations regarding measurement.	Rowe AK, Frankel MR, Sanders KA.

SOURCE KEY: C=CEASE Reference; G=Google Scholar; PM=PubMed (NIH.gov) **Bolded Authors** = SSRI Team members/meeting invitees

LITERATURE SEARCH

911 Use and Community Awareness in Acute Stroke

#	SOURCE	YEAR	PUBLICATION/ CITATION	TITLE	AUTHORS

STROKE INTERVENTION STUDIES/TRIALS LIST:

#	ACRONYM	TITLE	WEBSITE	PRINCIPAL INVESTIGATOR(S) &/OR AUTHORS
1	ASPIRE	Acute Stroke Program of Interventions Addressing Racial and Ethnic Disparities	http://www.theaspireprojectdc.org	NIH-FUNDED under Triumph Over Stroke Program: (1) Boden-Albala, Kidwell, Gibbons C., **Morgenstern, L.**, Edwards, DF.
2	BASIC	Brain Attack Surveillance in Corpus Christi	http://www.umich.edu/~strokepg/BASICforresearchers.html	NIH-FUNDED: (1) Lynda D. Lisabeth, PhD, MPH and Lewis B. Morgenstern, MD
3	INSTINCT	Increasing Stroke Treatment through Interventional Behavior ChangeTactics	http://www.med.umich.edu/em/research/instinct	NIH-FUNDED: (1) PI: Phillip A. Scott, MD (2) Authors: Scott PA, Xu Z, Meurer WJ, Frederiksen SM, Haan MN, Westfall MW, Kothari SU, **Morgenstern LB**, Kalbfleisch JD.
4	KIDS	Kids Identifying and Defeating Stroke (KIDS)	http://www.umich.edu/~strokepg/	**Lewis B. Morgenstern, MD**
5	SHARE	Stroke Health And Risk Education	http://www.umich.edu/~strokepg/SHARE.html	NIH-FUNDED: (1) **Lewis B. Morgenstern, MD** and Devin L. Brown, MD, MS

Appendix 22

Principal Investigator: Jauch, Edward C.

ABSTRACT: Critical treatments for acute stroke (including tPA) must be initiated within hours of symptom onset and yet <23% of patients are expected to arrive in time. **Pre-hospital delays are the primary contributors to overall delays in stroke care.** Previous efforts to improve arrival times have been costly, focused only on single factors, and showed minimal improvement. Major gaps exist due to the lack of community engagement with the identification of solutions to address complex, multi-component patient and system level factors.

Community Engaged Assessment to facilitate Stroke Elimination (CEASE) is a **new collaborative research study** bringing together a **highly synergistic team** of academic and community partners in a demographically- representative pilot area to: (1) Examine local community knowledge of stroke symptoms, 911/EMS services, and treatments; (2) Explore contextual factors related to knowledge, beliefs, and attitudes regarding multi-component factors; (3) Identify multi-component, community preferred intervening strategies to reduce time from onset to hospital arrival, **emphasizing novel interventions. These novel interventions may include** social marketing via multigenerational strategies (Facebook); Internet-based and tele-training with patients, families, and community and provider systems. Following formative assessment, we will develop and pilot an intervention in this community (i.e., NIH R21 application), and further replicate/test intervention effectiveness in a larger randomized cluster design in multiple SC communities (i.e., R01 application). CEASE will **inform existing novel methodologies** (e.g. REACH) **while applying novel Community Based Participatory Research**, with **novel interventions** (e.g., social media networks). **Large-scale dissemination** of findings and resulting materials can potentially improve stroke care, especially among disparate populations.

RELEVANCE: Nationally, stroke is one of the leading causes of death and the #1 cause of disability. **S.C. lies on the "buckle" of the stroke belt**, where stroke mortality is twice as high as the national average, leading to greater healthcare costs and lost productivity. In SC, **stroke occurs more frequently in younger persons and minorities**; resulting in high disparities that necessitate innovative strategies for both prevention and treatment of stroke. The proposed pilot community (i.e., Georgetown, SC) is a demographically-representative population, has a high stroke prevalence, and strong history of collaboration with MUSC.

Expert review and research metasynthesis have shown pre-hospital delays for acute stroke care include time intervals from: 1) symptom onset to the decision to seek medical attention (e.g., patient and community factors); 2) decision to seek medical attention to first medical contact (e.g., patient, community, health system factors); 3) first medical contact to hospital arrival (e.g., health system factors). **Patients with awareness of the early warning signs/symptoms of stroke are more likely to use the EMS, thereby achieving shorter delays in obtaining treatment and improving stroke outcomes**. However, despite national efforts to improve stroke awareness, the public's **knowledge of early warning signs of stroke remains low**. Delay in stroke treatment is also influenced by "who" recognizes the symptoms of stroke onset, with evidence of faster EMS activation **when a witness first recognizes the symptoms rather than the individual** experiencing the symptoms. **Health providers** may also contribute to delays, such as EMS/ED provider training needs, EMS dispatch priorities, and communication systems.

African Americans (AAs) suffer from significantly higher stroke mortality rates than Whites, and are less likely to recognize the early warning signs of stroke. African Americans are also more likely to delay seeking care for treatment. **Studies suggest single level, traditional mainstream approaches (i.e., patient awareness campaigns alone), show minimal impact in reducing delays especially in high risk disparate communities. Recommendations include multi-level, community-based participatory research (CBPR) approaches that engage high-risk communities, ensure cultural relevance, and partner with community stakeholders in all phases of the research process. These multiple levels include: 1) high-risk patients; 2) families/friends of high risk patients (i.e., community systems), 3) health provider systems,** including EMS (i.e., dispatch priorities, ED communication), ED (triage, knowledge of guidelines), and primary care (major contact with high risk patients)**. The use of novel technologies such as social networks, internet based education, and tele-training will be explored as potential intervening strategies due to their potential cost-effectiveness, reach, and sustainability.**

Appendix 23

Appendix 6

REACH-MUSC
Member, REACH Stroke Network

A Telemedicine Facilitated Network for Urgent Stroke Treatment in S.C.

MUSC Stroke Center; Medical University of South Carolina

http://www.muschealth.com/stroke/reach.htm

INTRODUCTION

What is REACH MUSC?

Remote **E**valuation of **A**cute **I**s**CH**emic **Stroke** is a partnership between S.C. rural/ community hospitals and the **M**edical **U**niversity of **S**outh **C**arolina to improve patient care by providing round-the-clock expert consultations via an innovative, web-enabled telemedicine outreach solution facilitating rapid assessment of stroke patients for use of the only FDA-approved treatment, the clot-busting drug Alteplase (tPA), and for other emergent therapies.

Facts compelling development/expansion of REACH MUSC:

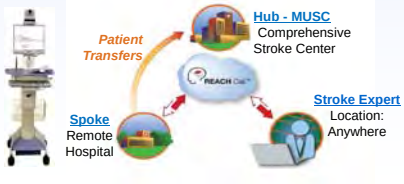
1. South Carolina has a very high rate of stroke
   - 4th leading cause of death; #1 cause of disability in USA.
2. Many strokes occur in smaller communities that lack expert stroke care in their nearby hospitals;
   - Most Primary Stroke Centers in S.C. are large and urban
3. Many strokes can be treated with tPA but this drug must be initiated within 3 hours after stroke (sometimes 4.5 hours).
   - Nationally, < 20% of patients arrive within 6-hours of stroke
4. The rates of tPA usage in S.C. are very low and need to be increased to lessen the burden of stroke on our state.
   - < 25% of eligible patients receive tPA; fewer in rural areas.

METHODS

REACH-MUSC Telemedicine Consultation Protocol:

- Suspected stroke patient arrives at Emergency Department (ED).
- Remote hospital (Spoke) calls MUSC for "REACH Stroke consult"
- MUSC Consulting Physician is contacted & connected via phone.
- Consultant logs into the REACH secure website to access and control the REACH cart: a mobile unit composed of a computer, LCD screen, and fully adjustable camera.
- Consultant speaks to patient and/or family, examines the patient using the NIH Stroke Scale (NIHSS) with the help of spoke nurse, views the CT scan that the site has previously uploaded to the REACH Call website, and makes a recommendation.
- Spoke Physician determines the appropriate course of action

Figure 1. REACH "Hub & Spoke" System of Care



STROKE NETWORK

REACH-MUSC has partnered with 15 hospitals since its inception in May 2008, representing 2,482 hospital beds and 471,875 annual emergency room visits; the largest with 453 beds, the smallest 25.

REACH-MUSC provided over 900 consultations through 2010.

- 50% Female and 35% African American
- Average Age = 66 years old; 44% were < 65 years of age!
- 23% received tPA, with an average NIHSS of 12
- 37% transferred to MUSC; 9% of transfers received advanced IA
- Most tPA recipients were discharged home (53%); only 6% expired
- Outcomes are comparable to outcomes from clinical trials of tPA.

Figure 2. REACH-MUSC Stroke Network

Time is Brain!

- Effectiveness of tPA is greatest when given as early as possible.
  - "Call Time Points" are critical monitors of program efficiency
- REACH-MUSC times were: *(average as of Dec. 2010)*
  - Door-to-Consult = 56 minutes (Goal: 20)
  - Door-to-Needle = 97 minutes (Goal: 60)
  - Virtual Consultant "at bedside" = 9 minutes (Good!)
- Greatest time barrier to treatment: Onset-to-911-to-Door
  - Most patients arrive outside of the 3-hour treatment window
  - Stroke education is vital! Stroke=Brain Attack>Call 911

Figure 3. It is all about People

RESULTS

tPA usage rates in S.C. were very low before REACH-MUSC:

- 1 year before REACH, tPA was used 12 times at the 1st 6 sites
- 1 year after wards, tPA was used 56 times; 4.6 times increase!

Access to expert stroke care for S.C. was low before REACH:

- With REACH, 76% of South Carolinians are now within a 60 minute drive of tPA treatment compared with only 38% prior.
  - % increase in access was highest along the I-95 corridor; a predominantly rural, high disparities region of S.C.

Figure 4. Increase in Access to Expert Stroke Care
for South Carolinians Through Telemedicine

Drive Time by Region	30 Minutes		60 Minutes	
Total State	**749,657**	**19%**	**1,542,452**	**33%**
Coastal Region	170,692	21%	213,327	26%
I-95 Corridor	247,144	**32%**	456,588	**58%**
Upstate/Midlands	331,821	14%	872,537	36%

For more information, contact: Medical University of S.C.; Abby Swanson Kazley, PhD (swansonaj@musc.edu)

FUTURE

These findings have informed future initiatives, including:

1. **Collaborative Quality Improvement Projects**
   - Community Awareness including increasing 911 utilization
   - Decrease REACH Critical Times, chiefly Door-to-Consult
2. **Stroke education for spoke and community providers**
   - Webinars and CME via AHEC statewide network
   - Develop research potential of this network
3. **Building other services on the REACH platform,** such as CREST (sepsis and trauma care)
4. **Yearly meetings with all stakeholders**
5. **Insure REACH is part of the S.C. State Stroke Plan**

ACKNOWLEDGEMENTS

We are very grateful for initial support from the **Duke Endowment**, **Health Sciences of South Carolina** and the **Centers Of Economic Excellence** program that was crucial in getting this project underway, as well as the continued support of **MUHA and MUSC and the partner hospitals.** We are also proud partners receiving support from the **South Carolina Clinical & Translational Research Institute** (SCTR)[^] and the **Southeastern Virtual Institute of Health Equality and Wellness** (SE VIEW).[~]

[*] SCTR Acknowledgement: This project was supported by the South Carolina Clinical & Translational Research Institute, Medical University of South Carolina's CTSA, NIH/NCRR Grant Number UL1RR029882. The contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIH or NCRR.

[~] SE VIEW Acknowledgement: This research and development project was conducted by the Medical University of South Carolina and is made possible by a cooperative agreement that was awarded and administered by the U.S. Army Medical Research and Materiel Command (USAMRMC) and the Telemedicine & Advanced Technology Research Center (TATRC), Fort Detrick, Maryland 21702, under Contract Number: W81XWH-10-2-0057

Appendix 24

REACH-MUSC
Member, REACH Stroke Network

Appendix 10

LAST DATA UPDATE: 06/14/11

	REACH-MUSC Hospital Partners (Spokes)				VOLUMES				PERCENTAGES		HOSPITAL INFO		
	Site Name and Location	County	SE VIEW Region	Start Date	Consults	tPA Indicated	tPA Given	Transport to MUSC	% Treated with tPA	% Transfer to MUSC	# Hosp. Beds✪	Annual ED Visits♦	Distance to MUSC (Miles~)
1	**Georgetown** *Georgetown, SC*	GEORGETOWN	Coastal	5/1/2008	147	32	27	67	18%	46%	131	31,990	61
2	**Waccamaw** *Murrells Inlet, SC*	GEORGETOWN	Coastal	5/6/2008	184	55	51	76	28%	41%	140	24,000	82
3	**McLeod** *Florence, SC*	FLORENCE	I-95	5/7/2008	226	55	53	28	23%	12%	453	63,000	133
4	**Grand Strand** *Myrtle Beach, SC*	HORRY	Coastal	9/1/2008	60	20	20	45	33%	75%	220	62,000	102
5	***Marion*** *Mullins, SC*	MARION	I-95	9/18/2008	106	19	17	47	16%	44%	124	23,885	119
6	**Williamsburg** – *Kingstree, SC*	WILLIAMSBURG	I-95	12/23/2008	100	25	22	66	22%	66%	25	11,000	74
7	**Coastal Carolina** *Hardeeville, SC*	JASPER	I-95	1/20/2010	98	13	13	32	13%	33%	45	18,000	88
8	**Piedmont** *Rock Hill, SC*	YORK	Rest of SC	3/26/2010	143	36	28	5	20%	3%	288	46,000	187
9	**Kershaw** *Camden, SC*	KERSHAW	Rest of SC	5/19/2010	91	14	14	18	15%	20%	121	24,000	148
10	**McLeod-Dillon** *Dillon, SC*	DILLON	I-95	7/29/2010	34	5	5	9	15%	26%	79	25,000	163
11	**Springs** *Lancaster, SC*	LANCASTER	Rest of SC	10/26/2010	43	9	9	6	21%	14%	231	30,000	176
12	**Carolina Pines** *Hartsville, SC*	DARLINGTON	I-95	1/21/2011	18	3	3	5	17%	28%	116	33,000	143
13	**Loris Community** *Loris, SC*	HORRY	Coastal	2/28/2011	9	4	4	4	44%	44%	105	20,000	117
14	**Loris-Seacoast** *Little River, SC*	HORRY	Coastal	2/28/2011	7	0	0	2	0%	29%	50	20,000	116
15	**Self Regional** *Greenwood, SC*	GREENWOOD	Rest of SC	3/2/2011	6	2	2	0	33%	0%	354	40,000	191
				TOTALS	1,250	286	262	404	21%	32%	2,482	471,875	127 Average

♦Self-Report Hospital Data.
✪BEDS = General Hospital Beds

~ Source: MapQuest (Fastest Driving Distance in Miles)
✪Source: SC DHEC at: http://www.scdhec.gov/health/licen/hrhptl.pdf

Appendix 25

Appendix 3

Part III: Restricted Data Elements Request Form

Inpatient Hospitalizations Restricted Data Elements	
ELEMENT REQUESTED:	**REASON FOR REQUEST:**
☑ Admission Date	Specific dates are needed to determine the number of days between admission at a REACH site and transfer to another facility, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☑ Discharge Date	Specific dates are needed to determine the number of days between admission at a REACH site and transfer to another facility for discharge, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☐ Patient Birth date	
☑ Patient Age in Years	Stroke effects the elderly and thus knowing exact age especially age above 85 is critical for analysis
☐ Medical Record Number	
☐ Patient Number (Facility Assigned)	
☑ Unique Patient Number (ORS Assigned)	To link patients across encounters to identify those with multiple admissions and ER visits
☑ Procedure Dates	Specific dates are needed to determine the number of days between admission at a REACH site where the patient received tPA and other associated procedures. The date will be needed to track the patient movement from REACH site to another facility for discharge, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☐ Patient Zip-Code (digits 1-5)	Need zip code and zip code characteristics (education, income)
☑ Charges by Summary Revenue Codes Not Rounded	To examine monetary changes with regards to secondary stroke prevention and changes in risks and quality indicators
☑ Total Charges Not Rounded	To examine monetary changes with regards to secondary stroke prevention and changes in risks and quality indicators
☐ Encrypted Carrier Codes	
☐ Health Care Professional ID ☐ Attending	

Appendix 3

❒ Other	
☑ Health Care Facility ID	Need a dummy code for REACH versus non-REACH patients based on REACH site prior to and post becoming a REACH site (data listed in application above) Need a dummy code for Region based by: Costal, I-95, Rest of SC (data listed in application above)

Appendix 3

Part III: Restricted Data Elements Request Form

Emergency Department Visits Restricted Data Elements	
ELEMENT REQUESTED:	**REASON FOR REQUEST:**
☐ Admission Date	Specific dates are needed to determine the number of days between admission at a REACH site and transfer to another facility, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☐ Patient Birth date	Specific dates are needed to determine the number of days between admission at a REACH site and transfer to another facility for discharge, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☑ Patient Age in Years	Stroke effects the elderly and thus knowing exact age especially age above 85 is critical for analysis
☐ Medical Record Number	
☐ Patient Number (Facility Assigned)	
☑ Unique Patient Number (ORS Assigned)	To link patients across encounters to identify those with multiple admissions and ER visits
☐ Procedure Dates	Specific dates are needed to determine the number of days between admission at a REACH site where the patient received tPA and other associated procedures. The date will be needed to track the patient movement from REACH site to another facility for discharge, especially when determining "drip-and-ship" patients. Specific date is the only way we would be able to track patient movement.
☐ Patient Zip-Code (digits 1-5)	Need zip code and zip code characteristics (education, income)
☑ Charges by Summary Revenue Codes Not Rounded	To examine monetary changes with regards to secondary stroke prevention and changes in risks and quality indicators
☑ Total Charges Not Rounded	To examine monetary changes with regards to secondary stroke prevention and changes in risks and quality indicators
☐ Insurance Carrier Codes	
☐ Health Care Professional ID ☐ Attending	

Appendix 3

❒ Other	
☑ Health Care Facility ID	Need a dummy code for REACH versus non-REACH patients based on REACH site prior to and post becoming a REACH site (data listed in application above) Need a dummy code for Region based by: Costal, I-95, Rest of SC (data listed in application above)

Appendix 3

Part III: Restricted Data Elements Request Form

Ambulatory Surgery, Imaging and Other Services/Equipment Requiring Certificate of Need Restricted Data Elements	
❒ Admission Date	
❒ Patient Date of Birth	
❒ Patient Age in Years	
❒ Patient Zip Code (digits 1-5)	
❒ Unique Patient Number (ORS Assigned)	
❒ Medical Record Number	
❒ Total Charges not rounded	
❒ Health Care Professional ID	
❒ Health Care Facility ID	

Appendix 3

Part III: Restricted Data Elements Request Form

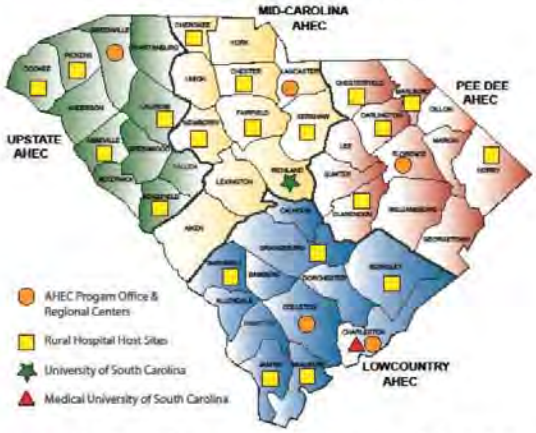
Home Health Encounters Restricted Data Elements	
❒ Date Service Span Begins	
❒ Date Service Span Ends	
❒ Patient Start of Care Date	
❒ Admission Date	
❒ Discharge Date	
❒ Patient Age in Years	
❒ Patient Date of Birth	
❒ Medical Record Number	
❒ Unique Patient Number (ORS Assigned)	
❒ Patient Zip Code (digits 1 - 5)	
❒ Skilled nursing services by date of service	
❒ Physical therapy services by date of service	
❒ Occupational therapy services by date of service	
❒ Speech therapy services by date of service	
❒ Respiratory therapy services by date of service	
❒ Medical social services by date of service	
❒ Home Health Aide by date of service	
❒ Charges by Type of Service (nursing, therapies, home health aid and other) not rounded	
❒ Total Charges not rounded	
❒ Health Care Physician Provider	
❒ Home Health Care Facility ID	

Appendix 26

AHEC SCHOOLS
Tele-Training Network

South Carolina Health Occupations Outreach Learning System (SCHOOLS)

ORGANIZATION EQUIPMENT UTILIZATION CHART



The South Carolina AHEC received a Health Resources & Services Administration grant in 2010 to expand its infrastructure by developing the South Carolina Health Occupations Outreach Learning System (SCHOOLS).

SCHOOLS is a collaboration between the AHEC Program Office at the MUSC and the four regional AHEC Centers to develop an affiliated network of 20 rural hospitals using technology to: (1) support the development and implementation of collaborative research initiatives across the state; (2) facilitate the delivery of curricula by on-campus faculty from MUSC to students participating in off-campus clinical rotations, and (3) provide educational programs for healthcare providers.

SCHOOLS uses the existing infrastructure of the Palmetto State Providers Network (PSPN) to disseminate educational content and facilitate communication directly with health professions students and clinicians located in communities distant from MUSC.

AHEC SCHOOLS Stroke Training - Enduring Material			
Title	**Presenter**	**Date of Broadcast**	**Credit Offered**
Optimizing Hypertension Control	Dr. Joel Handler	2/15/2011	CME
Diagnosis & Treatment of Stroke: An Application of Tele-medicine	Dr. Robert Adams	4/7/2011	CME
Stroke: Initial Management and Implications for the Emergency Dept.	Dr. Edward Jauch	4/19/2011	CME
Hypertension & Diabetes: Stoke Risks In South Carolina	Dr. Dan Lackland	5/10/2011	CME
To access CME online, go to: http://scahec.net/schools/library.html			

FY2011 STROKE CME: OUTCOMES

CME Requests by Program with Format						
Date	Time	Program	Length in Minutes	Participants*	Speaker	Format ^
02/15/11	00:00	Optimizing Hypertension Control (Recorded. Available until 2/15/2013)	75	1	Dr. Joel Handler	Enduring
02/15/11	07:30	Optimizing Hypertension Control	75	30	Dr. Joel Handler	Live
04/07/11	07:30	Diagnosis and Treatment of Stroke in South Carolina: An application of Tele-Medicine	60	17	Dr. Robert Adams	Live
04/19/11	00:00	Stroke: The First 3+ Hours Initial Management and Implications for the Emergency Department (Recorded. Available until 4/19/2013)	60	1	Dr. Edward Jauch	Enduring
04/19/11	07:30	Stroke: The First 3+ Hours Initial Management and Implications for the Emergency Department	60	7	Dr. Edward Jauch	Live
04/19/11	12:00	Stroke: The First 3+ Hours Initial Management and Implications for the Emergency Department	60	7	Dr. Edward Jauch	Live
05/10/11	07:30	Hypertension and Diabetes: Stroke Risks in South Carolina	60	7	Dr. Daniel Lackland	Live
05/10/11	12:00	Hypertension and Diabetes: Stroke Risks in South Carolina	60	18	Dr. Daniel Lackland	Live

Total CME Requests: 88

NOTES:

* Participants: Represent the number of times people requested credit for viewing the program.
Statistics on the number of times the enduring materials were accessed are not currently available.

^Format: How the CME-recipient accessed the presentation, either by participating in or by accessing Live Broadcast or Enduring Materials.
Enduring Recordings are available for 2-years (expire in 2013).

EVALUATIONS:

Evaluations were conducted using Survey Monkey and are accessibleonline as follows:

Dr Handler:
http://www.surveymonkey.com/sr.aspx?sm=b7WNQleYb713TY7dnn2iYkzonE3xh9rXg6wgXbxEAGQ_3d
Dr Adams:
http://www.surveymonkey.com/sr.aspx?sm=LgdpOEp_2ftEGoJltAd53p_2bwkECvXuq9dedKcsLcfo_2bTc_3d
Dr. Jauch
http://www.surveymonkey.com/sr.aspx?sm=dCYb8oiSLUEAar2AHJLmhpWBy_2fo4tL60H4WLXT95pYw_3d
Dr. Lackland
http://www.surveymonkey.com/sr.aspx?sm=AHD8wfv69YOSHW_2bggONAfAumAcD5F_2fU8FHGWhg3h81c_3d

Appendix 27

High Blood Pressure Treatment Among Black and White Stroke Patients

Andrea D Boan MS, David L Bachman MD, Robert J Adams MD, Brent M Egan MD, Joyce S Nicholas PhD, Andrew B Lawson PhD, Daniel T Lackland DrPH

Medical University of South Carolina, Charleston SC 29425

Background

Secondary stroke prevention remains a key component of all stroke programs. In addition to stroke specific strategies, the treatment of co-morbid conditions such as hypertension is an important consideration. In addition to racial disparities in the incidence of stroke, racial disparities are also seen in the prevalence and age of onset of hypertension and diabetes.

The purpose of this study was to assess racial differences in the prevalence and treatment of comorbid conditions among a stroke cohort.

Methods

One year follow up telephone survey of 384 subjects from the Stroke Education and Prevention in South Carolina Study cohort who were aged 45 years or older and discharged with a primary diagnosis of stroke (ICD 9 430-438) from October 1, 2008 to September 30, 2009. The survey consisted of a telephone interview using a questionnaire that was adapted from a standardized validated medical questionnaire. The interview consisted of approximately 40 non-judgmental questions about the subjects' demographics, health status, medications/ treatments, and quality of life. This project was approved by the Medical University of South Carolina's Institutional Review Board.

Hypertension, diabetes, and dyslipidemia were based on secondary discharge diagnosis codes. Pearson's and Exact chi-square p-values were used for racial comparisons. All statistical tests were performed using SAS 9.1 software at significance levels of 0.05.

Table 1. Characteristics of Hospitalized Stroke Patients

Characteristics (%)	Black (n = 111)	White (n = 269)	Total (N = 384)	p-value
Age				
< 65 years	42.4	57.6	47.4	
65 + years	59.5	40.5	52.6	*0.0032*
Gender				
Male	38.7	46.1	44.0	
Female	61.3	53.9	56.0	*0.2118*
Comorbidities				
Hypertension	94.6	87.4	89.5	*0.0367*
Diabetes	48.7	26.8	33.2	*<.0001*
Dyslipidemia	77.5	84.0	82.1	*0.1422*

Primary Author Contact Information: **Andrea D Boan, MS** boan@musc.edu
Funding: Stroke Education & Prevention in SC, Health Sciences SC [PI: David Bachman, MD]
Additional Funding: NIH/NINDS Impact of Nativity on Cardiometabolic Syndrome Factors in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) [Sub-contract PI: Daniel T Lackland, DrPH]

Results

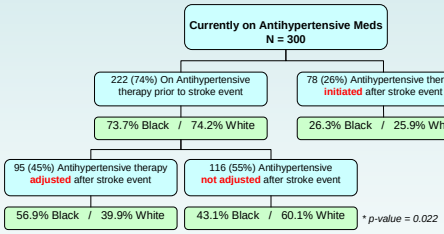
Table 2. Number of Associated Comorbid Conditions

# Comorbid Conditions	Black	White	Total	p-value
0	1.8	3.7	3.2	
1	18.9	17.5	17.9	
2	36.0	55.8	50.0	
3	43.2	23.1	29.0	*0.0004*

* Comorbid conditions – Hypertension, Diabetes, Dyslipidemia diagnosis at time of stroke discharge

Table 3. Proportion of Multiple Associated Comorbid Conditions

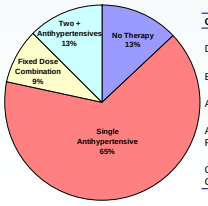
Comorbid Conditions	Black	White	Total	p-value
Hypertension + Diabetes	48.7	24.9	31.8	*<.0001*
Hypertension + Dyslipidemia	73.9	75.5	75.0	*0.7947*
Diabetes + Dyslipidemia	43.2	24.5	30.0	*0.0005*
All Three Conditions	43.2	23.1	29.0	*<.0001*



* Not currently on Antihypertensive Therapy Regimen: 30 (9%) [6.3% Black / 11.7% White]

Figure 1. Antihypertensive Therapy Regimen Pre- and Post- Stroke Event

Table 4. Class of Antihypertensive Therapy Post Stroke Event

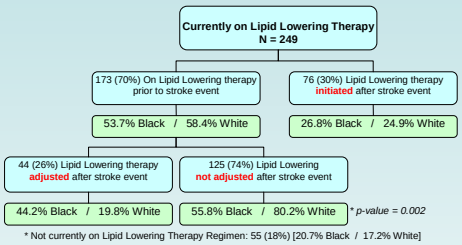


Class	Black	White	Total	p-value
Diuretics	18.2	12.5	13.9	*0.356*
Beta Blocker	5.5	23.3	19.0	*0.002*
ACE Inhibitor	36.4	46.0	43.7	*0.136*
Angiotensin Receptor Blocker	12.7	11.9	12.1	*0.968*
Calcium Channel Blocker	29.1	13.1	16.9	*0.010*

Results

Tb 5. Lipid Lowering Therapy Post Stroke Event

Lipid Lowering Therapy	Black (n = 66)	White (n = 204)	Total (N = 270)
No Therapy	31.8	22.1	24.4
Statins	68.2	77.9	75.6



* Not currently on Lipid Lowering Therapy Regimen: 55 (18%) [20.7% Black / 17.2% White]

Figure 2. Lipid Lowering Therapy Regimen Pre- and Post- Stroke Event

Tb 6. Anticoagulation Therapy Pre- and Post-Stroke Event

Blood Thinner Therapy	Black	White	Total	p-value
Aspirin	52.3	65.4	61.6	*0.0174*
Clopidogrel	29.0	20.5	22.9	*0.0861*
Dipyridamole	5.2	1.6	2.5	*0.0519*
Warfarin	12.0	16.8	15.5	*0.2594*
Other	1.0	2.8	2.3	*0.3307*
Currently on Anticoagulant	64.0	76.6	72.9	*0.0119*
On Anticoagulant Prior to Stroke	31.1	41.1	38.3	*0.0768*
Anticoagulant Therapy Changed	53.6	44.3	46.3	*0.3835*

Conclusions

Comorbid diseases are common among patients after stroke. The comorbid conditions seen most frequently in our study population were hypertension, diabetes, and dyslipidemia. Both hypertension and diabetes were significantly higher among black compared to white patients. A considerable proportion of the stroke patients had hypertension and dyslipidemia treatment initiated during or soon after their stroke hospitalization. A significantly higher proportion of black patients receiving hypertension or dyslipidemia treatment prior to stroke had their treatment regimen adjusted after the stroke event. Additional study will focus on the factors associated with the modification of blood pressure, lipid, and anticoagulant therapies as well as the lack of change associated with a stroke event.

Appendix 28

The Alberta Stroke Program Early CT Score (ASPECTS) Demonstrates Good Reliability When Applied to Non-contrast CT and CT-perfusion Parametric Maps

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MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

Introduction

Stroke is the third leading cause of mortality and the leading cause of disability in the United States, killing nearly 137,000 individuals in 2007. Hypertension is a major risk factor for ischemic stroke and south Carolina has some of the highest stroke incidence and mortality rates in the country. From 2000-2006 South Carolina experienced 130 stroke deaths per 100,000 whereas the national stroke death rate was 98 per 100,000 for individuals ≥35 years old.[1]

The detection and interpretation of early ischemic change and reversible brain ischemia in acute ischemic stroke imaging is critical in determining appropriate treatment. Image based selection criteria may be helpful in addition to traditional time based selection criteria for stroke treatment. However variability exists in how to quantify and interpret early ischemic change on brain computed tomography (CT) and CT-perfusion (CTP) parametric maps. The Alberta Stroke Program Early CT Score (ASPECTS) was devised as a semi-quantitative method to accurately and reliably determine early ischemic change in CT and has more recently been applied to CTP imaging. ASPECTS divides the middle cerebral artery (MCA) territory into ten regions. Each region is scored one point if normal and zero if abnormal yielding a score of ten in normal images and zero for diffuse ischemic involvement of the entire MCA territory. ASPECTS on non-contrast CT and CTP has previously been shown to predict neurological and functional outcome in ischemic stroke.[2,3] However the role of hypertension in ASPECTS has been less well defined.

Since ASPECTS is not currently used as part of the radiological assessment of ischemic stroke patients at the Medical University of South Carolina (MUSC) our objective was to determine the inter-observer variability of ASPECTS performed on admission CT *and* CTP imaging, including cerebral blood volume (CBV), mean transit time (MTT), and cerebral blood flow (CBF) maps, in acute ischemic stroke. This study assesses the feasibility of modeling parameters including using ASPECTS during the acute stroke period.

Methods

- Inclusion criteria:
  - Consecutive ischemic stroke patients admitted to MUSC between October 1, 2008 – September 30, 2009 – patients with primary diagnosis of ischemic stroke initially identified using ICD-9 codes 433, 434, 435, 437.0, 437.1
  - Age ≥ 45, received good quality non-contrast and CTP at admission, and had follow-up non-contrast CT or MRI within seven days of admission
  - National Institute of Health Stroke Scale (NIHSS) score ≥8 at admission
- Exclusion criteria:
  - Diagnosis of: intracranial hemorrhage, aneurysm, seizure, lacunar stroke
- Data collection
  - Non-contrast CT and CTP imaging abstracted from radiology record in electronic medical records
  - NIHSS, intracranial hemorrhage, aneurysm, seizure, lacunar stroke data collected from discharge summary and history and physical note in medical record
- Additional parameters collected:
  - Age, race, sex, co-morbidity history including atrial fibrillation, hypertension, hyperlipidemia, and diabetes mellitus, and type of treatment administered
- ASPECTS scoring
  - Two readers (a neuroradiologist and neurointerventional radiologist) experienced with ASPECTS assigned scores independently
  - Readers blinded to all clinical information except side of affected hemisphere and at least one week interval between scoring images to minimize recall bias
- Non-contrast CT scoring:
  - Abnormal score given for either hypoattenuation or mass effect in an ASPECTS region
- CTP scoring:
  - Abnormal score if CBV or CBF was decreased or MTT was increased relative to ASPECTS region in contralateral hemisphere
- Analysis
  - Kappa statistics and 95% confidence intervals (CI's) calculated for admission non-contrast CT, CBV, MTT, CBF, and follow-up imaging.

Results

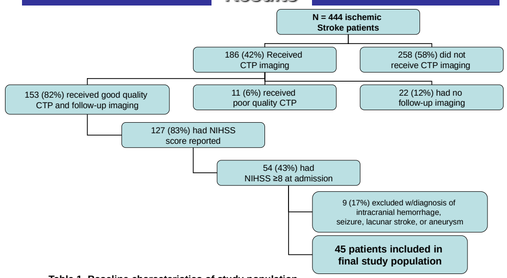

Table 1. Baseline characteristics of study population.

Baseline Characteristic	Overall N = 45
Mean age (years)	68.2 (± 12.8)
Gender male (%)	51
Race (%)	
Caucasian American	64.4
African American	35.6
Median admission NIHSS	15 (8-31)
Co-morbidity (%)	
Hypertension	77.8
Hyperlipidemia	42.2
Atrial fibrillation	24.4
Diabetes mellitus	19.6
Treatment (%)	
Intravenous (IV) tissue plasminogen activator (tPA) + medical therapy	26
Intra-arterial (IA) treatment + medical therapy	20
IV and IA + medical therapy	13
Medical therapy	41

Table 2. Mean ASPECTS scores for admission non-contrast CT, CTP cerebral blood volume, mean transit time, and cerebral blood flow maps.

Image Modality	Mean ASPECTS scores	
	Radiology reader 1	Radiology reader 2
Non-contrast CT	6.23	7.58
CT-perfusion		
Cerebral Blood Volume	6.58	7.58
Mean transit time	2.67	4.96
Cerebral blood flow	2.82	5.16

Table 3. Kappa statistics for the two ASPECTS scorers on admission non-contrast CT, CTP cerebral blood volume, mean transit time, and cerebral blood flow maps.

Image Modality	Inter-observer kappa value between radiology readers	(95% Confidence Interval)
NCCT (threshold >7 vs. ≤7)	0.61	0.40-0.82
Cerebral blood volume (threshold >6 vs. ≤6)	0.71	0.50-0.92
Mean transit time (threshold >5 vs. ≤5)	0.68	0.46-0.91
Cerebral blood flow (threshold >5 vs. ≤5)	0.63	0.41-0.84

κ > 0.80 implies excellent reliability; 0.61 ≤ κ ≤ 0.80 implies good reliability; 0.41 ≤ κ ≤ 0.60 implies moderate reliability; 0.21 ≤ κ ≤ 0.40 implies fair reliability; κ ≤ 0.20 implies poor reliability.

Conclusions

- The results of this feasibility study indicate that it is reasonable to include ASPECTS in the assessment of early ischemic change with strokes.
- ASPECTS demonstrates good reliability when applied to admission non-contrast CT and CTP parametric maps
  - Reliability was higher for CTP parametric maps than for non-contrast CT
  - Kappa statistic was lowest for non-contrast CT indicating variation in assessment or detection of early ischemic change
- Mean admission ASPECTS were higher for non-contrast CT and CBV imaging than for MTT and CBF imaging.
- Hypertension was diagnosed with 77% of the cases and appears as a significant parameter for analysis.
- The results support the increase in sample size such to assess blood pressure level with early ischemic change.

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1. Heart Disease and Stroke Maps – South Carolina. Center for Disease Control and Prevention. Ascertained from http://apps.nccd.cdc.gov/giscvh2/SessionTimeout.aspx. 2006.
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This project was supported by the South Carolina Clinical & Translational Research Institute with an academic home at the Medical University of South Carolina CTSA, NIH/NCRR grant number UL 1RR029882.

Appendix 29

Telling the Story of Stroke: Video Presentation <Play DVD >

Online at: http://www.muschealth.com/video/Default.aspx?cId=37

Elizabeth Lafata - A Stroke Patient's Dramatic Story

Daughter Of A Stroke Patient Speaks About The REACH SC Program

Donna's Stroke Story

Stroke patient returns to MUSC to thank staff

REACH MUSC Stroke Program- Roberta Jordan's Story

REACH MUSC

Appendix 30

CCSD Food Facts
What's in It?

= Best Choice

Lunch Menu

ITEM	SERVING	CALORIES	SODIUM	PROTEIN	CARBOHYDRATE	FAT	FIBER
ENTREES							
Beefaroni	1 cup	345	75	20	13	22	1
Chef Salad with Crackers	1 salad	230	405	17	14	12	3
Chicken Fajitas	1 fajita	295	610	15	19	16	2
Chicken Nuggets	5 pieces (3 oz)	110	330	7	7	6	1
Chicken Quesadilla	2 ½ wedges	375	480	45	18	16	2
Chicken Sandwich	1 sandwich	285	410	16	28	12	3
Hamburger	1 hamburger	220	505	12	20	11	2
Hot dog w/ Chili	1 portion	170	540	10	13	9	2
Macaroni & Cheese	1 cup	405	650	27	18	25	1
Meatloaf	4 oz	465	540	38	12	29	2
Nachos w/ taco meat	1 portion	280	590	18	19	15	2
Pizza	1 piece	270	800	15	32	10	4
Rotisserie Chicken	3 oz	155	95	30	0	4	0
Salisbury Steak	3 oz	225	305	19	1	17	0
Spaghetti w/ meat sauce	1 cup	275	505	19	24	12	3
Teriyaki Chicken	4 oz	200	990	25	8	7	0
Turkey	2 oz	55	700	11	2	1	0
STARCHES							
Baked Beans	½ cup	160	460	7	31	1	6
Baked Sweet Potato	½ cup	100	10	2	24	0	3
Black Beans	½ cup	60	330	4	11	0	4
Breadstick	1 stick	45	90	2	9	0	0
Brown Gravy	2 Tbsp	30	130	0	3	2	0
Corn on the Cob	1 cup	40	30	1	9	1	1
Mashed Potatoes	½ cup	70	335	1	14	1	1
Mexicali Corn	½ cup	55	175	2	11	2	1
Mini Bakers	½ cup	175	225	3	24	8	3
Peas	½ cup	90	255	4	10	4	3
Pinto Beans	½ cup	70	240	4	13	1	4
Rice	½ cup	125	95	3	27	0	1
Spanish Rice	⅓ cup	50	585	1	10	0	1
Veggie Fried Rice	½ cup	210	310	7	42	1	1
Whole Kernel Corn	½ cup	90	240	3	21	1	2
VEGETABLES							
Carrot Sticks w/ Dip	1 ½ oz bag	30	50	1	5	1	2
Glazed Carrots	½ cup	130	185	2	25	4	3
Green Beans	½ cup	25	485	1	5	0	3
Lettuce/Salsa/Sour Cream	⅓ cup	35	185	2	3	0	0
Lettuce/Tomato	leaf/slice	15	10	0	4	0	1
Mixed Vegetables	½ cup	65	100	3	12	1	4
Steamed Broccoli	½ cup	30	65	2	4	0	2
Steamed Cabbage	½ cup	60	95	1	7	3	3
Succotash	½ cup	140	475	5	21	4	5
Tossed Salad	½ cup	10	10	1	2	0	0
Turnip Greens	½ cup	40	25	3	7	0	3
DESSERTS							
Apple	1 apple	70	0	0	19	0	3
Banana	½ cup	105	0	1	27	0	3
Canned Fruit	½ cup	95	30	0	24	0	2
Jello w/ Fruit	½ cup	80	60	2	18	0	0
Orange Wedges	4 oz bag	70	0	1	16	0	3
Warm Cinnamon Apples	½ cup	40	15	0	8	1	1

*Sodium in mg; Protein, Carbohydrate, Fat & Fiber in grams

Prepared by the MUSC Dietetic Internship & The Lean Team, Spring 2011

CCSD Food Facts

What's in It?

= Best Choice

Ala Carte Menu

ITEM	SERVING SIZE	CALORIES	SODIUM	PROTEIN	CARBOHYDRATE	FAT	FIBER
SANDWICHES, SALADS & WRAPS							
Charleston Chicken Sandwich	1 sandwich	315	470	25	27	12	1
Chicken Salad Sandwich	1 sandwich	250	580	21	29	8	6
Chicken Salad Wrap	1 wrap	230	535	36	12	5	2
Club Wrap	1 wrap	210	965	15	24	6	2
Egg Salad Sandwich	1 sandwich	170	525	8	31	2	2
Ham Sub	1 sub	480	1405	41	16	27	1
Ham Wrap	1 wrap	225	1135	17	24	6	2
Italian Sub	1 sub	680	1835	44	18	47	1
Italian Wrap	1 wrap	735	1960	46	29	48	2
Roast Beef Sub	1 sub	490	740	42	17	27	1
Sub Station Club	1 sandwich	115	490	8	12	4	1
Tuna Salad Sandwich	1 sandwich	265	760	25	28	7	6
Tuna Salad Wrap	1 wrap	360	1080	42	18	13	2
Turkey Sub	1 sub	425	790	33	16	25	1
Turkey Wrap	1 wrap	180	455	12	24	4	2
CHICKEN & WINGS							
Buffalo Wings	6 wings	230	740	19	3	16	0
Chicken Tenders	3 strips	255	660	18	21	11	0
Honey BBQ Wings	6 wings	240	450	21	5	15	0
Hot Wings	6 wings	270	625	13	10	19	3
Marinated Wings	6 wings	205	606	16	7	13	1
EXTRAS							
French Fries (Large)	6 oz	195	400	2	30	8	2
French Fries (Small)	3 oz	95	200	1	15	4	1
SMART MOUTH PIZZAS							
Beef Pizza	7 inch	510	2425	38	27	27	2
Cheese Pizza	7 inch	450	2045	32	26	24	1
Meat-Lover's Pizza	7 inch	645	2655	39	26	42	1
Pepp & Sausage Pizza	7 inch	575	2410	36	26	36	1
Pepperoni Pizza	7 inch	730	3025	42	26	50	1
Sausage Pizza	7 inch	660	2535	39	27	44	1
Veggie Pizza	7 inch	475	2055	33	31	24	3
DESSERTS							
Apple	1 apple	70	0	0	19	0	3
Banana	½ cup	105	0	1	27	0	3
Brownie	1 brownie	230	145	2	32	11	1
Canned Fruit	½ cup	95	30	0	24	0	2
Chocolate Chip Cookie	1 cookie	60	50	1	9	3	0
Orange Wedges	4 oz bag	70	0	1	16	0	3
BEVERAGE							
1% Milk	1 carton	100	120	8	12	3	0
Skim Chocolate Milk	1 carton	120	190	8	21	0	0
Coburg Fruit Punch	1 bottle	190	40	0	44	0	0
Coburg Lemonade	1 bottle	160	30	0	38	0	0
Coburg Sweetened Tea	1 bottle	140	20	0	34	0	0
Dole Plus Fruit Punch	1 bottle	140	25	2	34	0	0
Gatorade Perform	1 bottle	130	270	0	34	0	0
CONDIMENTS							
Honey Mustard	1 packet	140	180	1	5	13	0
Ken's Fat Free Italian	1 packet	20	700	0	5	0	0
Ketchup	2 packets	10	135	0	3	0	0
Kraft Ranch	1 packet	70	110	0	1	7	0

*Sodium in mg; Protein, Carbohydrate, Fat & Fiber in grams

Prepared by the MUSC Dietetic Internship & The Lean Team, Spring 2011

MUSC MEDICAL UNIVERSITY of SOUTH CAROLINA

The Lean Team

FOOD LION

CCSD Food Facts
What's in It?

= Best Choice

Breakfast Menu

ITEM	SERVING	CALORIES	SODIUM	PROTEIN	CARBOHYDRATE	FAT	FIBER
BREAKFAST ITEMS							
Apple Cinnamon Mini Loaf	1 loaf	100	95	2	17	3	1
Bagel	1 bagel	275	535	11	53	2	2
Banana Muffin	1 muffin	95	100	2	16	3	1
Blueberry Muffin	1 muffin	90	105	2	15	3	1
Breakfast Burrito	1 burrito	260	565	12	31	9	2
Chicken Biscuit	1 serving	290	755	11	30	15	1
Chocolate Chip Muffin	1 muffin	95	90	2	16	3	1
Cream Cheese	1 packet	100	85	2	1	10	0
French Toast Sticks	1 serving	175	230	3	24	7	1
Grits with Cheese	½ cup	100	205	6	17	1	0
Oatmeal	½ cup	90	5	4	16	2	4
Pancake Pup	1 serving	140	420	7	17	5	3
Pancakes, Whole Grain	1 serving	175	370	5	29	5	2
Scrambled Eggs	2 oz	90	150	6	2	5	0
Toast with Jelly	2 slices	220	290	6	32	9	4
Turkey Sausage Biscuit	1 serving	155	415	8	13	8	0
Yogurt Drink	4 oz	100	55	3	22	0	0
CEREAL							
Apple Cinnamon Cheerios	1 bowl	90	95	1	20	1	1
Cheerios	1 bowl	100	180	3	20	1	3
Frosted Mini Wheats	1 bowl	100	5	3	24	0	3
Honey Nut Cheerios	1 bowl	135	230	2	27	2	2
Kix	1 bowl	110	200	2	25	1	3
Multigrain Cheerios	1 bowl	70	130	1	15	1	2
Raisin Bran	1 bowl	100	150	2	25	1	3
JUICE							
Apple Juice	4 oz	70	0	0	15	0	0
Grape Juice	4 oz	80	0	0	19	0	0
Orange Juice	4 oz	55	0	0	14	0	0

*Sodium in mg; Protein, Carbohydrate, Fat & Fiber in grams

Prepared by the MUSC Dietetic Internship & The Lean Team, Spring 2011

Appendix 31

COMMITMENT:

HEALTHY NORTH CHARLESTON ACHIEVE TEAM NORTH CHARLESTON, SC

CHART Member Name	Organization Name	Organization Role	Organization Type	Sector	Coach? Yes/No
Sharon Crossley	SCDHEC	Health Educator	State Public Health Department	Community and health	yes
Kyle Lahm	City of North Charleston Mayor's Office on Education, Youth and Family	Program Coordinator	Local Government	Community and worksite	yes
Karla Beckwith	SCDHEC	Clinic Manager and Nutrition Consultant	State Public Health Department	Community and health	No
Anne Bergin	Trident United Way	Director of Health	Non profit	Community and CIO	no
Vonie Gilreath	Berkeley, Charleston Dorchester Council of Governments	Mobility Manager	Government Organization	Community	no

Patricia Mack	Tri-County Black Nurses Association	Volunteer	Civic Organization	Health and CIO	no
Wannetta Mallette	City of North Charleston and Project Manager LAMC	CMP Project Manager, LAMC,	Dual roles- Local government and LAMC- non profit	Community and CIO	no
Lisa Robinson, PHD	Community & Faith Advocate	volunteer	Non profit	CIO and Community	no
Katy Simison	Charleston County School District	Magnet Coordinator	School district	School and worksite	no
Brenda Strople	Charleston County School District	Nurse Liaison	School district	School and worksite	no
Dr. Gwendolyn Todd-Houston,	Franklin C Fetter Health Clinic	Medical Director	Federal clinic	Health and community	no
Deborah Williamson	MUSC College of Nursing	Associate Dean of Practice	Academic and community	Healthcare	no

Appendix 32

PLANNING, IMPLEMENTATION, AND EVALUATION

Healthy North Charleston Work Plan
Project Goal 1.0 (list up to 5)
Goal:

By September 2012, increase the percent of the number of kindergarten, 2nd and 5th grade elementary students who achieve 150 minutes of physical activity/education per week and 250 minutes for secondary students.

Priority area(s) the goal addresses:
Chronic diseases: X arthritis X cancer X cardiovascular disease X diabetes x obesity
Related risk factors: X nutrition X physical activity □ tobacco

How the goal impacts the priority area(s):

Daily physical activity reduces the risk of preventable chronic conditions by reducing obesity risk factors, daily stress of students and increase physical fitness.

Measuring progress:

Primary Data Source	Secondary Data Source
Healthy People 2020, SC Dept of Ed School-based surveys	SC Healthy profiles report
Describe the progress	*Will complete for the CAP resubmission in March 2011*

Describe barriers or issues and plans to overcome them	*Will complete for the CAP resubmission in March 2011*

Annual Objective 1.1 (minimum of 1 objective per goal)

Setting/Sector:
□ Community at large □ Community institution/organization □ Health care X School □ Work site

Policy/environmental change strategy to achieve this objective:

Focus area and strategy from list found in Appendix A School Sector: Physical Activity 1. Active time during physical education class 2. Physical education for middle and high school students 3. Physical education for elementary school students

Evidence/practice base for the strategy:

Completion of School Health Index and wellness plans, Best Practices in Physical Education, Standards for Initial Programs in PE Teacher Education (AAHPERD, 2001)

Target number of people that will be reached: 550

How the objective impacts the problem:

Development of school-based wellness teams cultivates a culture of active living and healthy lifestyles.

Objectives:

1a. By September 2011 increase the number of school wellness committees from 0-3, one each in Chicora, Hursey and Mary Ford elementary schools, to promote physical activity in kindergarten, 2nd and 5th grade children. 1b. Facilitate accomplishment of the goals and objectives of the 3 school wellness committees by linking the committees to existing resources and building capacity for acquisition of new resources to promote physical activity in school aged children. 1c. Identify a survey on physical activity to administer to secondary level students in the Fall, 2011. 1d. Increase the number of opportunities for physical activities outside of school hours for students.

Measuring progress:

Primary Data Source	Secondary Data Source
SC Department of Education School-based surveys	Superintendent's Wellness Initiative Healthy School Checklist survey for 2011 and wellness team quarterly reports
Describe the progress	*Will complete for the CAP resubmission in March 2011*
Describe barriers or issues and plans to overcome them	*Will complete for the CAP resubmission in March 2011*

Action Steps (list up to 10):

Action Steps	Specific Person(s)/ Organization(s) Responsible	Timeframe
1. Assist school leadership with identification of key stakeholders to serve on wellness committees	CHART Team	October 2010-September 2011
2. Inform wellness committee members and school leadership on best practices to promote increased physical activity and safe play areas.	Charleston County School District and CHART Team, City of North Charleston	October 2010-September 2011
3. Link Wellness committees with local resources to coordinate and integrate existing programs in order to promote physical activity.	CHART Team, CCSD, Eat Smart Move More Coalition, MUSC College of Nursing	January 2011-September 2011
4. Assist wellness committees in advocating for increased physical activity in afterschool programs in the CHANGE study area	City of North Charleston Recreation Department, CCSD	January 2011-September 2011
5. Provide access to school facilities after regular school hours to allow community access to safe recreation areas.	City of North Charleston, CCSD, CHART Team	October 2010-May 2011
6. Establish survey process to facilitate data gathering in Morningside Middle, North Charleston High and Military Magnet Academy (Middle and High) schools for 2011-12 school year.	CHART Team, School Wellness Teams, School Improvement Councils	June-August 2011

7. Establish baseline criteria for in-school and out of school activities	CHART Team, City of North Charleston Recreation Department, MUSC College of Nursing	January 2011-September 2011
8. Work with CIO's to provide physical activity programs to the community by partnering with the faith-based community. Encourage collaboration between organizations to expand resources for physical activity programs in the community.	CHART Team, faith based organizations	January 2011 - September 2011
9. Award Mini-grants to area schools and CIO's to support increased physical activity policy and environmental changes.	LAMC, City of North Charleston, DHEC, CHART Team	March 2011
10.		
11.		
12.		

Project Goal 2.0 (list up to 5)

Goal:

By Sept 2012 increase the number of opportunities where healthy fruits and vegetables are served.

Priority area(s) the goal addresses:
Chronic diseases: □ arthritis X cancer X cardiovascular disease X diabetes X obesity
Related risk factors: X nutrition □ physical activity □ tobacco

How the goal impacts the priority area(s):

Without regular access to available healthy food, chronic disease prevention related to food behaviors is unachievable.

PRIMARY DATA SOURCE	SECONDARY DATA SOURCE
BRFSS, CIO SURVEYS, SCHOOL SURVEYS	**HEALTHY PEOPLE 2020**
DESCRIBE THE PROGRESS	***WILL COMPLETE FOR THE CAP RESUBMISSION IN MARCH 2011***
DESCRIBE BARRIERS OR ISSUES AND PLANS TO OVERCOME THEM	***WILL COMPLETE FOR THE CAP RESUBMISSION IN MARCH 2011***

Annual Objective 2.1 (minimum of 1 objective per goal)

Setting/Sector:
X Community at large □ Community institution/organization □ Health care □ School □ Work site

Policy/environmental change strategy to achieve this objective:

Community At Large: Nutrition
1. Recruitment of supermarkets and large grocery stores in underserved areas
2. Public transportation to supermarkets and grocery stores
3. Farmers' markets
4. WIC and food stamp vouchers or food stamp benefits at farmers' markets

School: Nutrition
1. School breakfast and lunch programs
2. Healthy food and beverage options beyond the school food services
3. Healthy food preparation practices

Evidence/practice base for the strategy:

MAPPS Strategy, WIC Voucher Data, Food inventory data

Target number of people that will be reached: 750

How the objective impacts the problem:

An increased availability and access to healthy foods enables the community to increase consumption of healthy foods and ultimately reduce the burden of chronic disease.

Objective:

By September 2011, increase consumption of healthy foods in ten community settings (schools, school events, municipal recreation events, neighborhood councils and other related community events.)

Measuring progress:

Primary Data Source	Secondary Data Source
SC Obesity Plan, Center for Child and Adolescent Health Data	BRFSS
Describe the progress	*Will complete for the CAP resubmission in March 2011*
Describe barriers or issues and plans to overcome them	*Will complete for the CAP resubmission in March 2011*

Action Steps (list up to 10):

Action Steps	Specific Person(s)/ Organization(s) Responsible	Timeframe
1. Support Implementation of additional Community Gardens either at schools or in neighborhoods where soil and air quality meets established environmental standards.	CHART Team, Department of Health and Environmental Control DHEC, CCSD and Community Volunteers, USC School of Public Health, LAMC	November 2010- September 2011
2. Develop and distribute a transportation guide of practical routes to food outlets/resources within the city of North Charleston.	CHART Team, Berkeley Charleston Dorchester Council of Governments, MUSC College of Nursing, CARTA	November 2010- September 2011

3. Provide training to school food services and community organizations on washing practices to increase usage of fresh, locally grown produce	Lowcountry Local First, CHART Team, Clemson Extension Service, Charleston County School District, LAMC, USC	January 2011-September 2011
4. Promote Food literacy through community education	CHART Team, DHEC, Eat Smart Move More, MUSC College of Nursing, City of North Charleston	January 2011-September 2011
5. Work with workplaces and CIOs to adopt healthy food policies.	CIOs, CHART Team, Metanoia CDC, LAMC	January 2011-September 2011
6. Assist CIOs and schools in the identification of and application for grant funding such as the USDA grants for additional fruits and vegetables.	CHART Team, MUSC Center for Community Health Partnerships, City of North Charleston	January 2011-September 2011
7. Award Mini-grants to area schools, worksites and CIO's to support policy and environmental change related to healthy eating.	CHART Team, DHEC, Eat Smart Move More, MUSC College of Nursing, City of North Charleston, LAMC	January 2011-September 2011

SUSTAINABILITY PLAN

Describe the plan to maintain the CHART and/or associated activities beyond the national funding commitments. Elements of sustainability include CHART infrastructure, maintenance, and development of local capacity, identification of additional funding sources, or policy implementation that may continue beyond the life of this funding.

Through accomplishment of common goals, ongoing communication and inclusive practices, the CHART will continue to grow and expand. The team will work to establish Healthy North Charleston goals and objectives as a part of the community-at-large. The CHART Team will work with the community to encourage the reallocation of resources to promote healthy eating and active living. By linking community resources and leveraging existing resources, program initiatives will be sustained. Work to identify sources of new funds and collaborate with other community groups to access new funding.

COMMUNICATIONS PLAN

Describe any plans your CHART has to communicate this plan or your ACHIEVE work to your greater community or stakeholders.

Through Healthy North Charleston Semi-annual newsletters, CCSD websites, municipal websites, LAMC, TUW, DHEC, neighborhood associations newsletters, etc., our plan will be communicated to the target community and the rest of the city as a whole.

RESOURCES

Describe what additional resources (e.g., funding, equipment, media, human resources, in-kind) that have been committed, and by whom, to leverage ACHIEVE resources.

CHART Membership time commitment, Trident United Way Community Issues Management System (data),Eat

Smart Move More Tri-County Chapter Website, Charleston County School District Carol B White PEP grant, Health empowerment zone grant through MUSC College of Nursing of $40,000, DHEC Region 7 staff time and $20,000 Cancer prevention and education money, Meeting space and staff time from the City of North Charleston	
Date completed	12/10/10
Date revised	

Appendix 33

CARTA

WWW.RIDECARTA.COM

(843) 724-7420

Discounts for low-income, senior, and disabled riders are available. Call or visit the website for more information.

Buy your bus pass when you board. Make sure you have exact change.

For catchin Bus 1 ome, know that it comes every 20 minutes.

SPECIAL NOTE: Bus 102 & 11 do not run on Sundays. Bus 10 offers Sunday service.

Save a lot

4411 Durant Avenue
Charleston, SC 29405

Healthy Tips

- Treat yourself! You don't have to do away with your favorite foods, but treat your body well by limiting sweets.
- Drink Water! 6-8 glasses every day.
- Add some color to your plate! Colorful fruits and vegetables add nutrition to your meals.

CARTA-Way Healthy Food

An Initiative of Healthy North Charleston & MUSC

Guide to using the CARTA Bus System to get to the Save-A-Lot Grocery Store

CARTA-Way Healthy Food

An Initiative of Healthy North Charleston & MUSC

Healthy North Charleston

P.O. Box 190016
North Charleston, SC 29419-9016

843-740-5822

Healthy@NorthCharleston.org

Eat Right. Live Well.

Save a lot

CARTA-Way Healthy Food

An Initiative of Healthy North Charleston & MUSC

Ride CARTA to Save a lot

WHIPPER BARONY PARK/HORIZON

Tak Bus 10 Northbound)
Taco Bell
Burger King on Rivers Ave
Get off at Rivers & Durant
Arrive at Save-A-Lot

RETURN
Tak Bus 10 outhbound)
Get off where you got on

Cost: $1.75 each way

ACCABEE

Tak Bus 102 orthbound)
Azalea & Elegans
Azalea & Meridian
Get off at the SUPER STOP

Tak Bus 10 lorthbound)
To Rivers & Durant
Arrive at Save-A-Lot

RETURN
Tak Bus 10 outhbound)
To the SUPER STOP

Tak Bus 102
et off at Rivers & Jeff

Cost: $2.05 each way

CHICORA

Tak Bus 1 lorthbound)
Spruill & Burton
Spruill & English
N. Carolina & Calvert
N. Carolina & Success
N. Carolina & Reynolds
Get off at the SUPER STOP

Tak Bus 10 lorthbound)
To Rivers & Durant
Arrive at Save-A-Lot

RETURN
Tak Bus 10 outhbound)
To the SUPER STOP

Tak Bus 1 outhbound)
Get off where you got on

Cost: $2.05 each way

UNION HEIGHTS

Take Bus 10 (Northbound)
Meeting & Little
Meeting & Comstock
Get off at Rivers & Durant
Arrive at Save-A-Lot

RETURN
Take Bus 10 (Southbound)
Get off where you got on

Cost: $1.75 each way

Appendix 34

This research and development project was conducted by the Medical University of South Carolina and is made possible by a cooperative agreement that was awarded and administered by the U.S. Army Medical Research and Materiel Command (USAMRMC) and the Telemedicine & Advanced Technology Research Center (TATRC), Fort Detrick, Maryland 21702, under Contract Number: W81XWH-10-2-0057

The TATRC Contracting Officer's Representative (COR) is Wilbur W. Malloy at wilbur.malloy@tatrc.org and the TATRC Project officer is Mae Hinnant at mae.hinnant@tatrc.org

The views, opinions and findings contained in this research are those of the Company/Laboratory/medical facility etc. and do not necessarily reflect the views of the Department of Defense and should not be construed as an official DoD/Army policy unless so designated by other documentation. No official endorsement should be made.

SE View

Alzheimer's Telemedicine Project

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Changing What's Possible in Health Care.

Changing What's Possible in Health Care.

MUSC
MEDICAL UNIVERSITY of SOUTH CAROLINA

Why should I learn more about cognitive illnesses, such as Alzheimer's disease?

The number of people with dementia, such as Alzheimer's disease, is growing each year, especially in South Carolina. For unknown reasons, Alzheimer's disease affects African Americans more frequently than Non-Hispanic Whites. South Carolina is home to a large number of elderly African Americans, and many live in rural parts of the state. Very few are diagnosed or treated for the disease in these areas. This may be because there is limited or no access to centers that specialize in patients with dementia.

What is being done about this?

The Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW) program was created to develop educational and outreach programs and conduct community-based research on health disparities.

The rapid and steady increase in the prevalence of dementia is a major public health problem. This Alzheimer's Telemedicine project within the SE VIEW program will bring the specialized staff at MUSC to rural areas of South Carolina to evaluate and diagnose African Americans suffering from Alzheimer's disease and other cognitive disorders.

The MUSC Alzheimer's Research team will see patients in rural areas through "telemedicine," or video conferencing. With access to doctors who specialize in dementia, this project will allow for early detection and treatment options that may otherwise not be possible

What are the advantages of participating in this study?

- FREE access to renowned specialists in neurological disorders for those recruited in the study
- The chance for early detection; therefore the ability to better treat symptoms and progression of the disease
- Patients and their caregivers don't have to leave their hometown for access to specialists that they otherwise would not have in their area
- The chance to be a part of a program that aims to help improve healthcare options in your community

For more information:

Courtney O'Neill

MUSC Alzheimer's Research & Clinical Programs
5900 Core Road, Suite 203
Charleston, SC 29406

Phone: (843) 740-1592 ext. 21
Fax: (843) 740-6113
oneillc@musc.edu

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Appendix 35

Telemedicine in the Evaluation of Alzheimer's Disease in a Rural, African American Population

Recently, MUSC established the Southeastern Virtual Institute for Health Equity and Wellness (SE VIEW) to address health disparities in South Carolina and other southeastern states as part of a cooperative agreement with the United States Department of Defense.

Under SE VIEW, MUSC Alzheimer's Research & Clinical Programs will be working to address health disparities in South Carolina by utilizing telemedicine in the evaluation of Alzheimer's disease in rural, African American populations. With the leadership of Jacobo Mintzer, MD, the program will focus primarily on rural areas with a highly concentrated African American elderly population, where there may be difficulty in reaching diagnostic and treatment centers.

Compared to White Non-Hispanic patients, African Americans have a high prevalence rate of Alzheimer's disease in SC; however, very few in rural areas of the state are diagnosed and treated. The team at MUSC Alzheimer's Research & Clinical Programs will partner with hospitals in rural SC to diagnose and evaluate subjects, using telemedicine, to potentially allow for early detection and treatment options that may otherwise not be possible.

This project will additionally work to validate the applicability of telemedicine in clinical practice. Visit **www.musc.edu/seview** for more information on SE VIEW.

SE View

Alzheimer's Research & Clinical Programs

This research and development project was conducted by the Medical University of South Carolina and is made possible by a cooperative agreement that was awarded and administered by the U.S. Army Medical Research and Materiel Command (USAMRMC) and the Telemedicine & Advanced Technology Research Center (TATRC), Fort Detrick, Maryland 21702, under Contract Number: W81XWH-10-2-0057
The TATRC Contracting Officer's Representative (COR) is Wilbur W. Malloy at wilbur.malloy@tatrc.org and the TATRC Project officer is Mae Hinnant at mae.hinnant@tatrc.org
The views, opinions and findings contained in this research are those of the Company/Laboratory/medical facility etc. and do not necessarily reflect the views of the Department of Defense and should not be construed as an official DoD/Army policy unless so designated by other documentation. No official endorsement should be made.

Core Team Members

Sabra Slaughter, PhD:
Chief of Staff to the President of MUSC, Assoc. Professor

Thomas Gordon, PhD, MHA:
Strategic Planning Consultant

Jennifer Friday, PhD:
Evaluation Consultant

Tracey Smith, MHA:
Project Manager

ARCP Members

Jacobo Mintzer, MD:
Principal Investigator

Beth Safrit, NP:
Clinical Director

Nyssa Sturbin:
Business Manager

Changing What's Possible
in Health Care

Courtney O'Neill
843.740.1592 ext 21
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MEDICAL UNIVERSITY of SOUTH CAROLINA

Appendix 36

Frequently Asked Questions
Partner Sites

Q: How many people will use the telemedicine equipment at the partner site? We are looking for one or two physicians at your site to serve as site leaders. This person(s) will work with the telemedicine study and involvement from other physicians will be on a referral basis.

Q: What kind of equipment will be used? The equipment we have identified for partner sites will be a lightweight laptop with a high definition camera. It is mobile and will be locked down for use of this study only. The equipment is user-friendly, but we will also offer technical support for any issues that may arise.

Q: How do we as the partner site identify subjects for this study? The MUSC Alzheimer's Research & Clinical Programs team will provide specific training for partner staff members on how to identify subjects and how to facilitate the telemedicine diagnosis and treatment process. Our group will come to your facility periodically for training and to discuss any issues/concerns with the process.

Q: How will subjects be recruited? The primary method will be physician referrals. We will work to recruit patients to the site leader by speaking to physicians in the area and other community leaders. Potential patients must meet inclusion and exclusion criteria.

Q: What happens once the partner site leader determines a patient to be eligible for this study? The site leader will approach the individual (and/or the caregiver) with an informed consent form and once this is signed, the patient will be scheduled.

Q: How do we schedule the patients? The MUSC team will work with the partner site and site leader on a specific schedule that works conveniently for all parties. For example, we can decide to both set aside Tuesdays, from 11am-2pm for the telemedicine project. Patients for this project will only be scheduled during this time.

Q: How long will it take to see one patient via telemedicine? Approximately 2-3 hours.

Q: What happens after the telemedicine exam? The MUSC team will make a diagnosis and a second interview will be conducted via telemedicine with the subject, the subject's family and local treatment team to convey the results of the assessment. All information obtained will be forwarded to the patient's primary physician and treatment will be determined by that physician.

Q: What are the advantages to the patient? Early detection is critical. Even though there is no cure for various forms of dementia, there are ways to treat the symptoms. Additionally, the patient is seen at no cost to them and patients do not have to travel outside of their hometown to be seen by specialists.

Q: What are the advantages to the partner site? The partner site will not incur the cost to diagnose patients in this study. More importantly, this is an opportunity to reach out to those needing specialized treatment in your area and to show further commitment to improving this population and eliminating health disparities.

Changing What's Possible
in Health Care

Courtney O'Neill
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Appendix 37

Location _____ Collected by _____

Medical History Form

Information supplied by **Proxy/ Subject (circle answer)**
Name of proxy (if applicable): _____

Relationship to patient: _____

Briefly describe the main problems and areas of concern that you may have with your memory.

_____

_____

1. When did this change or problem first occur? _____

2. Did the symptoms began immediately or some time after a known stroke Y N NA
If yes, describe (give dates)

_____

_____

3. Please review the following list of items. Check if you are having problems in that particular area. Please indicate at what age the problems first became apparent.

	Problem	Age Present	Problem began	Comments
A. Forgetfulness	Y /N			
B. Remembering Names	Y /N			
C. Remembering Messages	Y /N			
D. Remembering the Date	Y /N			
E. Job Performance	Y /N			
F. Driving	Y /N			
G. Shopping	Y /N			
H. Managing Money	Y /N			
I. Word finding	Y /N			
J. Home Safety	Y /N			
K. Social Withdrawal	Y /N			
L. Balance or Walking	Y /N			

4. Symptom onset and progression (choose the one that fits the best)
_____ Symptoms had gradual onset and have gotten gradually worse
_____ Symptoms began suddenly (over days to weeks) and have gotten gradually worse over time
_____ Symptoms began gradually but there have been one or more periods of sudden worsening (over days to weeks) since the symptoms began
_____ Symptoms began suddenly (over days to weeks) but have remained relatively unchanged over time
_____ Not applicable
_____ Other (describe)
_____

5. Focal symptoms
Has the patient ever experienced any of the following (if so, describe)
_____ Sudden numbness of one side of the face or body

_____ Sudden weakness of one side of the face or body
_____ Sudden loss of vision in one or both eyes
_____ Any fainting or blacking out spells
_____ Seizures or convulsions
_____ Any change in consciousness from blood sugars too high or too low
_____ Any change in consciousness from blood pressure too low or too high
_____ Any dizzy spells or vertigo
_____ Any episodes diagnosed by a doctor as a TIA or stroke
_____ Any sudden episodes of confusion lasting at least 5 minutes or more
_____ Difficulty walking or keeping your balance
_____ Unexplained falls or near falls
_____ Numbness of the feet or hands
_____ Tremor or shaking
_____ No such symptoms experienced
If any answers are positive, please describe below including all dates that events occurred if known:
_____

_____

6. MEDICAL HISTORY
Indicate if you have had or currently have any of the following conditions
A. High Blood Pressure Y /N _____ _____
B. Elevated cholesterol Y /N _____ _____
C. Heart attack/heart disease Y /N _____ _____
D. Irregular heart beat Y /N _____ _____
E. Lung disease Y /N _____ _____
F. Diabetes Y /N _____ _____
G. Thyroid Problems Y /N _____ _____
H. Depression Y /N _____ _____
I. Other Psychiatric illness Y /N _____ _____
J. Weight loss in past year Y /N _____ _____
K. Sleep disorder Y /N _____ _____
L. Any other medical problems Y /N _____ _____
M. Prostate cancer Y /N _____ _____
N. Breast or uterine cancer Y /N _____ _____
Eye problems, seizures, cancer, past surgeries, tremor, etc.
_____

_____

7. Diet history
Are you on any special diet, if so, describe below including length of time on this diet.
Include whether prescribed by a doctor or attempted on your own
_____

---

8. Please report whether you have ever been diagnosed by a doctor with any of the following conditions. Check all that apply:
_____ Alzheimer's disease
_____ Senile dementia
_____ Dementia
_____ Hardening of the arteries
_____ Parkinson's disease or parkinsonism
_____ Multiple small strokes

_____ Age-associated forgetfulness/memory changes of “normal aging”
_____ Lewy body disease
_____ None diagnosed
_____ Other diagnosis related to your memory

9. Please list any of the following symptoms you may have experience in the last 12 months. Describe any positive answers below:
_____ Sadness/depression
_____ Unusual happiness or elated mood
_____ Hallucinations
_____ Illusions (changes in size, shape, color, or movement of objects)
_____ Sudden, unexplained crying
_____ Sudden unexplained laughter
_____ Problems controlling your urine/bladder not due to a known bladder, kidney, or prostate problem
_____ Delusions (thoughts or ideas that are not true)
_____ Difficulty with sleep
_____ Agitation/aggressiveness
_____ Wandering aimlessly
_____ Poor appetite
_____ Weight loss
_____ No such symptoms experienced
_____ Other change in behavior or thinking
Please describe all positive answers below:
_____

_____

10. Any known financial or social stressors in the home at this time (ex. Another family member ill; financial difficulties)
_____ no
_____ yes (describe below)
_____

Appendix 38

Family History Form

Number of full brothers: _____ Living _____ Deceased
Number of full sisters: _____ Living _____ Deceased
Number of half-brothers: _____ Living _____ Deceased
Number of half-sisters: _____ Living _____ Deceased
Subject's mother _____ Living or _____ Deceased (if deceased approximate age at death _____)
Cause of death _____
Subject's father _____ Living or _____ Deceased (if deceased approximate age at death _____)
Cause of death _____

Y/N Disease	**Who is affected?**
__ Dementia/Alzheimer's/Severe memory loss	
__ Parkinson's disease	
__ Stroke/TIA	
__ Epilepsy/seizure/convulsions	
__ Depression/nerve problems	
__ Alcohol/Drug problems	
__ Diabetes/Sugar	
__ High blood pressure	
__ Brain aneurysm or tumor	
__ Mental retardation/Down's syndrome	
__ Thyroid disease/goiter	
__ Disorder of the immune system	
__ Muscle disease or progressive weakness	
__ Heart disease/heart attack/heart failure	
__ Learning disability	

First Degree relative with dementia/memory problems? **Y/ N**

Appendix 39

Appendix 39

Patient Satisfaction Survey

Please mark the box that reflects your response to the following questions:	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
I was able to communicate adequately with the physician/healthcare provider.	☐	☐	☐	☐	☐
I had difficulty hearing or understanding the specialist over the telemedicine system.	☐	☐	☐	☐	☐
I had difficulty seeing the specialist over the telemedicine system.	☐	☐	☐	☐	☐
I would have received better care if I saw the specialist in person.	☐	☐	☐	☐	☐
I would prefer to see the specialist in person despite the inconvenience of having to drive a farther distance.	☐	☐	☐	☐	☐
Having a clinician in the room with me during my telemedicine session made me feel comfortable.	☐	☐	☐	☐	☐
Having a clinician in the room during my telemedicine sessions helps me feel that I have a team of people contributing to my treatment.	☐	☐	☐	☐	☐
The ability to provide telemedicine consultation improved my confidence in my primary care physician.	☐	☐	☐	☐	☐
I was able to understand the diagnosis and recommendation that the specialist discussed with me.	☐	☐	☐	☐	☐
Overall I was very satisfied with the telemedicine session.	☐	☐	☐	☐	☐

Appendix 40

Appendix 40

Caregiver Satisfaction Survey

Please mark the box that reflects your response to the following questions:	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
I was able to communicate adequately with the physician/healthcare provider.	☐	☐	☐	☐	☐
I had difficulty hearing or understanding the specialist over the telemedicine system.	☐	☐	☐	☐	☐
I had difficulty seeing the specialist over the telemedicine system.	☐	☐	☐	☐	☐
My relative/friend would have received better care if they had seen the specialist in person.	☐	☐	☐	☐	☐
I would prefer my relative/friend see the specialist in person despite the inconvenience of having to drive a farther distance.	☐	☐	☐	☐	☐
Having a clinician in the room during the telemedicine session made me feel comfortable.	☐	☐	☐	☐	☐
Having a clinician in the room during the telemedicine sessions helps me feel as if a team of people are contributing to my relative/friend's treatment.	☐	☐	☐	☐	☐
The ability to provide telemedicine consultation improved my confidence in my relative/friend's primary care physician.	☐	☐	☐	☐	☐
I was able to understand the diagnosis and recommendation that the specialist discussed.	☐	☐	☐	☐	☐
Overall I was very satisfied with the telemedicine session.	☐	☐	☐	☐	☐

Appendix 41

Protocol: Appendix I – Letter of Introduction

Date: _____
RE: Stroke Survey

Dear _____:

You have been selected to receive this letter because you received a consult at your local ER through the Medical University Hospital (MUSC) REACH Telemedicine. For that reason we are asking for your help. Sometime within the next month you will receive a telephone call from a telephone interviewer who will ask you to take about 15 minutes of your time to answer some questions over the phone regarding your experience. Please take your time to complete this survey. However, you are certainly free to say no to participation in the survey. If you decide not to participate, it will not affect your treatment in any way.

The questions we will ask have to do with the reason you had the consult, how you came to the ER, and what happened after that consult. If you believe that any specific questions are sensitive or embarrassing, you are certainly free not to answer that question or any other questions you may object to.

Some patients may be too disabled to answer the questions themselves. If you are a relative of the stroke patient and participate in the care of your family member on a daily basis, you may answer the questions if the patient has agreed for you to answer for him/ her.

If the patient has died since their hospitalization, we apologize for intruding on your privacy.

MUSC employees may participate in the survey but have no obligation to do so.

If you do not wish to be called regarding this survey, please call the number below. You may leave a message or talk directly with Ms. Jennifer Garry who is working with us on this project. If the patient is deceased, you may also call the number to let us know so that way we will be sure not to bother you further. You may also contact us by email at garryj@musc.edu or send a letter to the below address if you would like to decline being contacted about this survey.

MUSC Stroke Center
Attn: Jennifer Garry
19 Hagood Avenue, Suite 501
Charleston, SC 29425
843-792-9796

Thank you in advance for helping us with this project. The information you provide will help us do a better job in preventing and treating stroke in South Carolina.

Best wishes,

MUSC Stroke Center

Appendix 42

Appendix 3

Protocol: Appendix II – Interview Questionnaire

PATIENT SURVEY

"Hello, this is _____ calling from the Medical University of South Carolina. This month the University is conducting a study with individuals who were evaluated at their local ER through our REACH stroke telemedicine program, and we'd really appreciate your help and cooperation."

“May I please speak to (_PATIENT’S NAME_)?”

[INTERVIEWER SPEC: IF PATIENT IS UNABLE TO COMPLETE THE INTERVIEW (CANNOT SPEAK, NOT PHYSICALLY ABLE, ETC.) SAY: “I would like to speak with someone who would be able to answer questions about (PATIENT’S NAME) health and activities. Would that be you or someone else?” IF THE PATIENT IS ON THE PHONE, CONTINUE WITH THE INTERVIEW. IF SOMEONE ELSE, ASK TO SPEAK WITH THAT PERSON OR IF THE PROXY ANSWERS THEN SAY: “If (PATIENT’S NAME) has agreed you may respond for him/her”. IF THE PATIENT OR PROXY IS NOT AVAILABLE MAKE AN APPOINTMENT FOR CALL-BACK.]

[ONCE SELECTED INDIVIDUAL OR PROXY RESPONDENT IS ON THE PHONE]

“The purpose of this study is to learn more about the experiences and needs of individuals that we have consulted through our telemedicine program. The information will be used to improve the treatment and services .”

“Your participation is voluntary, and any information you provide will be kept. We are interested in learning all of your opinions and experiences, but your name and phone number will not be connected to any information you provide as part of the interview. The interview will take about 10 minutes to complete.”

“If there is any question that you do not want to answer, let me know and I will move to the next question. You may stop the interview at any time.”

“Before we begin I would like to ask if you have any questions or concerns?” [ANSWER QUESTIONS OR CONCERNS IF POSSIBLE.]

I. “Are you willing to participate in the study?”

1 YES

2. NO

II. “Would you be willing to be contacted in the future for follow up?”

1 YES

2. NO

INTERVIEWER CHECK:

III. PERSON RESPONDING IS THE PATIENT ---- GO TO Q.1

IIIa. RESPONDENT IS NOT THE PATIENT -------- Then ask…

Appendix 43

YEMASSEE TOWN HALL HEALTH SERIES

SAVE-THESE -DATES

Saturday October 30, 2010
Cancer Education Guide (CEG) Training Seminar
8:30 am – 1:00 pm

- **Learn how to lower your risk of cancer and lead a healthy lifestyle**
- **Teach these skills to your family, friends, and community**
- **Breakfast and lunch provided**
- **Registration deadline is October 22, 2010**

To register: Call Ethel Denmark, 803- 625-2548; 843-441-3215 or Denise Pack 843-589-2565

Friday December 3, 2010
Breast Health and Mammography Screenings
10:00 am – 3:00 pm

- **Mammogram and Clinical Breast exams for women ages 40+ years**
- **Uninsured/underinsured women are eligible for free screening**
- **Appointments are required**
- **Registration begins November 1, 2010**

Blood Pressure Check
Diabetes – Blood Sugar Check

- **A1C and Cholesterol Check for $10**

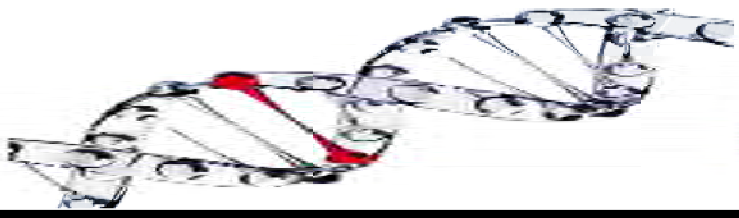
To register: Call Ethel Denmark, 803 625-2548; 843-441-3215 or Denise Pack 843-589-2565

Saturday December 4, 2010
Prostate Cancer Screenings & Health Day Activities
10:00 am – 3:00 pm

- **Prostate screenings are offered to men age 50 + years African American men who have a family history of prostate cancer should consider screening at age 45 years**
- **Uninsured/underinsured men are eligible for free screening**
- **Appointment required**
- **Registration begin November 1, 2010**

Dental checks up for children up to age 18 years
Seasonal vegetables and healthy foods for sale
HIV/AIDS Testing
Depression Screening
Free healthy educational fun for the entire family!
To register: Call Ethel Denmark, 803 625-2548; 843-441-3215 or Denise Pack 843-589-2565

Appendix 44



MUSC

Count on News 2
WCBD-TV Charleston

American Cancer Society

College of Charleston

US TOO

Second Chance

Support Group

Cancer

SEA ISLAND COMPREHENSIVE HEALTH CARE CORPORATION

An Evening of Research & Recipes for Results!

Working Together, Reaching Solutions

When: Friday, February 11, 2011
Time: 6:00P.M.
Where: International Longshoremen's Association
1142 Morrison Drive, Charleston, SC 29403

For more information, call Jim Etheredge at (843) 792-8192 or email etherjam@musc.edu

Join us for an evening of discussing the latest developments in cancer research and promoting healthy living

Additional Partners

Alpha Phi Alpha Fraternity, Inc.
Charleston County Stroke Action
Georgetown Outreach Ministry
Kappa Alpha Psi Fraternity, Inc.
MUSC Southeastern VIEW
Knights of Peter Claver
Arabian Temple #139
Chi Eta Phi Nursing Sorority
Girl Scouts of America
Low Country Chapter Oncology Nurses
100 Black Men of Charleston
Omega Psi Phi Fraternity, Inc.
Athenian Club
Closing the Gap in Healthcare
Jack & Jill of America, Inc
MUSC College of Nursing
WE Venture, LLC for Men Symposium

Appendix 45

ATTACHMENT 3

January 2011	Prepare Event Summary and distribute to all coalition members		Felicia Veasey Debbie Bryant Melanie Jefferson	January 2011
January 2011	Solicit volunteers	Internal and external; Finalize what we offer volunteers with finance and coordination for volunteer arrangements;	Felicia Veasey Jim Etheredge Debbie Bryant	January 2011
January 20112 months prior	Finalize and place ads with media partners		Vicki Agnew	
January 2011	Finalize volunteer assignments		Felicia Veasey Jim Etheredge	January 2011
January 2011	Prepare Talking Points as needed		Debbie Bryant	January 2011
January 2011	Order additional tables, chairs, tablecloths as required		Tonya Hazelton	January 2011
January 2011	Schedule media interviews		Vicki Agnew	January 2011
January 2011	Confirm food, drink		Jim Etheredge	January
January 2011	Assemble goody bags	Girls Scouts Troop	Debbie Bryant	January 2011
February 2011	Finalize list of items to transport to event		Jim Etheredge	February 2011
February 2011	Media Advisory Out		Vicki Agnew	January 2011
1 Day Prior	Media contacts prior to press conference		MUSC Public Relations	
February 2011	Deliver materials to event site	Pens, Brochures, etc	Jim Etheredge	February 2011
1 Day Prior	Carry out preliminary set up	Place tables Hang banners	Jim Etheredge	
Event Day	Setup and carry out event	See separate work plan	Drs. Kraft & Ford	March 2011
Post Event	Letter of thanks	Coalition and speakers	Drs. Kraft & Ford	March 2011
Post Event	Post Event Tally	# Attendees	Felicia	February 2011
Post Event	Prepare Event Summary	Attendees, Media hits	Jim Etheredge Felicia Veasey	March 2011
		line/how often; who/how will confirmation/health assessment materials be sent/received; notifying re: transportation; assembling files; maintaining spreadsheet	Melanie Jefferson	

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ATTACHMENT 4

Table 1. Prostate Cancer Research Training Course – Summer of 2010Cancer Research Training Course Summer of 2010 HCC Room 121, 1:00 – 2:00 p.m.		
Week	**Topic**	**Instructor and Organizational Affiliation**
Week 1 **Tuesday, June 8, 2010**	Welcome and Overview	**Marvella E. Ford, PhD**, Associate Director, Cancer Disparities Program, Associate Professor, Department of Medicine, Division of Biostatistics & Epidemiology **Melanie S. Jefferson, MPH**, Program Coordinator, Cancer Disparities Program, HCC
Week 1 (Basic Science Research Lecture) **Wednesday, June 9, 2010**	Overview of the Hollings Cancer Center	**Andrew S. Kraft**, **MD,** HCC Director, MUSC
Week 2 **Thursday, June 17, 2010**	Introduction to Health Disparities Research	**Rebecca Bullard-Dillard**, **PhD**, CU; **Judith Salley**, **PhD**, SCSU; **Leroy Davis**, **PhD**, VC
Week 3 (Clinical Research Lecture) **Monday, June 21, 2010**	Anatomy and the Function of the Prostate	**Harry S. Clarke, MD,** PhD, Associate Dean for Graduate Medical Education and Professor, Urology Services, MUSC
Week 3 (Population Science /Epidemiologic Research Lecture) **Tuesday, June 22, 2010**	Vitamin D and Prostate Cancer	**Sebastiano Gattoni-Celli, MD,** Professor Radiation Oncology
Week 3 (Clinical Research Lecture) **Wednesday, June 23, 2010**	• Pursuing a Graduate Dual Degree and • Completing a Residency in Radiation Oncology	**Gabrielle Cannick, DDS, PhD** **Leander Cannick, MD**, Department of Radiation Oncology, MUSC
Week 4 (Basic Science) **Tuesday, June 29, 2010**	Apoptosis of Prostate Cancer Cells	**Christina Voelkel-Johnson, PhD,** Assistant Professor, Microbiology & Immunology MUSC
Week 4 (Biostatistical Methods Lecture) **Thursday, July 1, 2010**	Biostatistical Issues in Prostate Cancer Research	**Elizabeth Garrett-Mayer, PhD,** Director, HCC Biostatistical Core, Department of Medicine, Division of Biostatistics & Epidemiology
Week 5 (Population Science/Epidemiologic Research Lecture **Tuesday, July 6, 2010**	Epidemiologic Issues in Prostate Cancer Research	**Anthony Alberg, PhD,** HCC Associate Director, Prevention and Control Program, Associate Professor, Department of Medicine Division of Biostatistics & Epidemiology, MUSC
Week 5 (Population Science) **Thursday, July 8, 2010**	Prostate Cancer Research: Perspectives of Community Members	**Debbie Bryant, RN** Cancer Disparities Outreach Efforts, Outreach Coordinator, HCC Cancer Disparities Program, MUSC
Week 6 (Biostatistical Methods Lecture) **Tuesday, July 13, 2010**	Statistical Genetics	**Emily Kistner-Griffin, PhD**, Assistant Professor, Department of Medicine, Division of Biostatistics and Epidemiology
Week 6 (Basic Science Lecture) **Thursday, July 15, 2010**	Developmental Transcription Factors in Prostate Cancer	**Demetri Spyropoulos, PhD**, Associate Professor**,** Pathology & Laboratory Medicine

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Week 7 (Population Science Lecture) **Tuesday, July 20, 2010**	Qualitative Research Methods	**Charlene Pope, PhD**, Associate Professor, College of Nursing, MUSC
Week 8 (Population Science Research Lecture) **Tuesday, July 27, 2010**	Cancer Disparities in South Carolina	**Marvella E. Ford, PhD HCC** Cancer Disparities Program
Week 8 (Population Science Lecture) **Thursday, July 29, 2010**	Project Sugar: Community-based genetic research project among the Sea Islanders (Gullahs) in South Carolina	**Ida J. Spruill, PhD**, Assistant Professor, College of Nursing, MUSC
Week 9 (Tips for Preparing Graduate School Applications) **Tuesday, August 3, 2010**	Improving Graduate School Admission Rates	**Cynthia F. Wright, PhD**, Assistant Dean for Admissions and Associate Professor, College of Graduate Studies, MUSC
Week 9 (Rehearsals) **Thursday, August 5, 2010**	Research Presentation Rehearsals and Evaluations	**All Research Students** **Dr. Marvella Ford**, HCC **Ms. Melanie Sweat,** Program Coordinator
Week 10 (Rehearsals and Evaluations) **Tuesday, August 9, 2010**	Research Presentation Rehearsals and Evaluations	**All Research Students** **Marvella Ford**, **PhD** **Melanie S. Jefferson**