

# MOVING FROM HOPE TO ACTION:

TRANSFORMING RESEARCH TO  
ELIMINATE HEALTH DISPARITIES  
ACROSS GENERATIONS

*Part of the James E. Clyburn  
Health Disparities Lecture Series*

*April 20, 2012*

**POSTER SESSION &  
ABSTRACTS**





*Moving from Hope to Action: Transforming Research to  
Eliminate Health Disparities Across Generations*

**Part of the James E. Clyburn Health Disparities Lecture Series  
April 20, 2012**

**POSTER SESSION &  
ABSTRACTS**

*The poster session and corresponding abstract booklet showcase health disparities research and practice being conducted by University of South Carolina faculty members, research staff, and students as well as community, clinical, and/or agency partners*

# LIST OF POSTERS

<i>Poster #</i>	<i>First Author</i>	<i>Title</i>	<i>Abstract #</i>
1	Thomas, Tracey*	Written and Spoken Narratives about Health and Cancer Decision Making among African Americans: A Community Photovoice Project	28
2	Friedman, Daniela	The South Carolina Cancer Prevention and Control Research Network: A Collaboration of Researchers, Federally Qualified Health Centers, and Community Partners Focused on Implementing and Disseminating Evidence-based Cancer Programs and Interventions	10
3	Hébert, James	Reducing Cancer Health Disparities through Community Engagement, Research, and Training: the South Carolina Cancer Disparities Community Network-II	12
4	Browne, Teri	Kidney Transplant Disparity in South Carolina	7
5	Smallwood, Stacy	Working with Communities to Generate Community-level and Community-engaged Interventions to Reduce Health Disparities	27
6	Luchok, Kathryn	Assessing Unmet Reproductive Health Needs for Women in Shelters	21
7	Martin, Amy B.	Association between Need For and Availability of Dialysis Services	22
8	Patel, Grishma*	The South Carolina Collaborative Approach to the Health Information Technology Regional Extension Center: A Mechanism to Permit Health Equity	25
9	Leonhirth, Deshia*	Disparities in Adult Access to Care, Insurance Coverage, Health Behaviors, and Quality of Diabetic Care in the Delta region of the United States (2009)	19
10	Wallace, K.	Results from a colonoscopy based screening program for the uninsured: a pilot study from South Carolina	29
11	Armstead, Cheryl	Debt Stress Predicts Body Mass Index	2
12	Mondesir, Favel	Factors associated with poor glycemic control among a multi-ethnic sample of older diabetic adults	24

*\*Denotes student entry*

# LIST OF ABSTRACTS

<i>Abstract #</i>	<i>First Author</i>	<i>Title</i>	<i>Poster # (if applicable)</i>
1	Adams, Swan Arp	Influencing Dissemination and Implementation Science through Innovative GIS Application	
2	Armstead, Cheryl	Debt Stress Predicts Body Mass Index	11
3	Brandt, Heather	Results of a Practice Enhancement Opportunity Assessment of Federally Qualified Health Centers in South Carolina	
4	Brandt, Heather	Colorectal Cancer Information Seeking Behavior and Trusted Sources: Opportunities for Intervention	
5	Brandt, Heather	Physician Recommendation as a Predictor of Participation in Colorectal Cancer Screening: A Population-based Study of South Carolina Adults	
6	Brandt, Heather	Planting Healthy Roots: A Look at the Right Choice Fresh Start Farmers Market: Using Documentary Film to Evaluate and Disseminate Community-Based Participate Research	
7	Browne, Teri	Kidney Transplant Disparity in South Carolina	4
8	Drayton, Ruby Fore	Diet & Activity Community Trial: High-Risk Inflammation	
9	Felder, Tisha	Prevalence of oral antineoplastic agent use among Medicaid enrollees diagnosed with breast cancer: 1998-2008	
10	Freedman, Darcy	The Right Choice Fresh Start Farmers' Market: A Multidimensional Farm-to-Health Center Intervention	
11	Friedman, Daniela	The South Carolina Cancer Prevention and Control Research Network: A Collaboration of Researchers, Federally Qualified Health Centers, and Community Partners Focused on Implementing and Disseminating Evidence-based Cancer Programs and Interventions	2
12	Hébert, James	Reducing Cancer Health Disparities through Community Engagement, Research, and Training: the South Carolina Cancer Disparities Community Network-II	3

<i>Abstract #</i>	<i>First Author</i>	<i>Title</i>	<i>Poster # (if applicable)</i>
13	Hilfinger Messias, DeAnne K.	ENLACE Pilot Study: A Community-Based Participatory Research Initiative to Enhance Physical Activity in Mexican-Origin Women in South Carolina	
14	Hilfinger Messias, DeAnne K.	La Iniciativa Latina contra el Cáncer: Promotora-Delivered Community Outreach to Address Cervical and Breast Cancer Health Disparities in the South Carolina Midlands	
15	Howard, Khirshon	Differential Gene Expressions in Breast Cancer Epithelia of African American and European American Women: Health Disparity at the Gene Array Level	
16	James, Calvin	Assessing Prostate Cancer Educational Materials Readability, Suitability, and Content	
17	Johnson, Leslie A.	Human Zinc Transporter 1 (hZIP1) Plays a Role in Zinc Regulation in Prostate Cancer Pathogenesis and is Significantly Down-regulated in African American Men as compared to European American in Prostate Glands	
18	Leith, Katherine H.	Evaluating Effectiveness of Partnerships: A Social Network Analysis of the South Carolina Cancer Disparities Community Network	
19	Leonhirth, Deshia*	Disparities in Adult Access to Care, Insurance Coverage, Health Behaviors, and Quality of Diabetic Care in the Delta region of the United States (2009)	9
20	Leonhirth, Deshia*	Healthcare resource disparities among persons living with HIV and AIDS (PLWHA)	
21	Luchok, Kathryn	Assessing Unmet Reproductive Health Needs for Women in Shelters	6
22	Martin, Amy B.	Association Between Need for and Availability of Dialysis Services	7
23	Mayo, Rachel	The South Carolina Witness Project: Witnessing to Save Lives	
24	Mondesir, Favel	Factors associated with poor glycemic control among a multi-ethnic sample of older diabetic adults	12

<i>Abstract #</i>	<i>First Author</i>	<i>Title</i>	<i>Poster # (if applicable)</i>
25	Owen, Otis	Improving the Recruitment and Retention of African-American dyads for cancer Disparities Research: Lessons Learned from a Community Academic-Clinical Team	
26	Patel, Grishma*	The South Carolina Collaborative Approach to the Health Information Technology Regional Extension Center: A Mechanism to Permit Health Equity	8
27	Smallwood, Stacy	Working with Communities to Generate Community-level and Community-engaged Interventions to Reduce Health Disparities	5
28	Thomas, Tracey*	Written and Spoken Narratives about Health and Cancer Decision Making among African Americans: A Community Photovoice Project	1
29	Wallace, K.	Results from a Colonoscopy Based Screening Program for the uninsured: A Pilot Study from South Carolina	10
30	Wigfall, Lisa T.	HIV-testing among Financially Disadvantaged Women Diagnosed with Cervical Cancer in South Carolina	
31	Workman, Lauren M.*	A Gender-based Examination of Colorectal Cancer Screening Participation among Participants in Colon Cancer Awareness and Educational Program in two South Carolina Counties	

*\*Denotes student entry*

**Title:** Influencing Dissemination and Implementation Science through Innovative GIS Applications

**Authors:** Swann Arp Adams, PhD, Leepao Khang, MPH, Daniela B. Friedman, MSc, PhD, Vicki M. Young, PhD, Dayna Campbell, MS, James R. Hebert, ScD

**Abstract:**

Cancer-related health disparities in South Carolina (SC) are among the largest in the nation. The SC Cancer Prevention and Control Research Network, in partnership with the SC Primary Health Care Association (SCPHCA), and Federally Qualified Health Centers (FQHCs), aims to reduce cancer disparities by promoting evidence-based cancer interventions in community-based primary care settings. Partnership activities include examining FQHCs' capacity for conducting research and developing a cancer-focused data sharing network. Data sharing and collaborative analysis is viewed by the team as critical to support networking between FQHCs and researchers for future research aimed at translating evidence-based strategies into practice. A data-sharing subcommittee with representatives from the SC Statewide Cancer Prevention and Control Program and the SCPHCA was convened to pilot a system for sharing and analyses of administrative claims data currently housed in the SCPHCA's central data repository. Partnership activities resulted in the development of formalized business agreements between the academic unit and three FQHCs with multiple clinic sites and the SCPHCA. Geospatial methods were used to examine travel distance to the health center and cervical cancer screening behaviors. Logistic regression modeling techniques were used to assess the association between travel distance and cervical cancer screening. Women living further from health centers were less likely to have ever screened, screened within the last year, and screened within the last 3 years for cervical cancer. This novel and innovative integration of geospatial information with clinical practice, cancer screening, and health outcomes will advance dissemination and implementation science and influence future evidence-based interventions that will reduce cancer-related health disparities in SC.

**Previously Presented At/Published In:** 5th Annual NIH Conference on the Science of Dissemination and Implementation: Research at the Crossroads

**Contact Information (corresponding author):**

Swann Arp Adams, PhD  
USC Cancer Prevention & Control Program  
915 Greene St, Room 244  
Columbia, SC 29208  
adamss@mailbox.sc.edu  
Tel: 803.576.5620  
Fax: 803.576.5624

**Funding Source:** Study funded by the Centers for Disease Control and Prevention and National Cancer Institute-funded Cancer Prevention and Control Research Network U48/DP001936-01W1 (PI: J.R. Hébert; Co-PI: D.B. Friedman). Partially supported by an Established Investigator Award in Cancer Prevention and Control from the Cancer Training Branch of the NCI to JR Hébert (K05 CA136975)

**Conflict of Interest Statement:** The authors declare no conflicts of interest.



**Title:** Debt Stress Predicts Body Mass Index

**Authors:** Cheryl Armstead, Ph.D., James Hebert, Sc.D., & Godwin Mbamalu, Ph.D.

**Abstract:**

**Background:** The national financial downturn has health implications for African Americans (AAs) in South Carolina (SC). AAs in SC exhibit extreme obesity disparities, even at higher socioeconomic levels. While exercise, diet, and general stress are implicated in obesity and its sequelae, debt-related stress is usually not considered by researchers. It is our objective to examine associations between debt, stress, and lifestyle among AAs, focusing on weight-related behaviors.

**Methods:** A cross-sectional convenience sample of 135 homeowners participated in a thirty minute internet based survey, "The Home Ownership & Health Study". The current analyses focus on the responses of ninety-six AA homeowners.

**Results:** The mean age of the sample was 44.85(SD= 8.04). Their mean body mass index in kg/m<sup>2</sup> (BMI) was in the obese range at, 32.57 kg/m<sup>2</sup> (SD= 9.38). After adjusting for age and gender, regression modeling indicated that forty-one percent of the variance in BMI was predicted by frequency of debt worry ( $\beta=0.76$ ,  $p=0.001$ ), degree of debt stress ( $\beta=0.56$ ,  $p=0.001$ ), concern about paying off total indebtedness ( $\beta=0.305$ ,  $p=0.045$ ), lack of physical activity ( $\beta= -0.251$ ,  $p=0.001$ ), and depression ( $\beta=0.26$ ,  $p=0.01$ ). Weight gain in the past six months was not associated with debt stress or income. Twenty-eight percent of the variance in six month weight gain was predicted by increased red meat consumption ( $\beta=0.43$ ,  $p=0.001$ ), stress ( $\beta=0.33$ ,  $p=0.002$ ), decreased consumption of fruits and vegetables ( $\beta=0.23$ ,  $p=0.02$ ), and depression ( $\beta=0.20$ ,  $p=0.06$ ).

**Conclusion:** Weight-related risk factors among AA homeowners may be characterized by a variety of co-existing behavioral and socioeconomic risk factors. Intervention strategies targeting higher socioeconomic status AA populations should be tailored to work within the context of the many challenges of financial debt, which may serve as barriers to healthy lifestyles. Increased health promotion efforts targeting debt, stress, financial management, and weight-related health behaviors may be needed to enhance wellness among AA homeowners.

**Contact Information (corresponding author):**

Cheryl A. Armstead, MS(R), PH.D  
Associate Professor, USC Department of Psychology  
Cancer Prevention and Control Program & SC Cancer Prevention and Control Research Network  
University of South Carolina, 915 Greene Street, Suite 251, Columbia, SC 29208  
(Office) 803.576-5642 (Fax) 803.576.5624  
E-mail: armstead@mailbox.sc.edu

**Conflict of Interest Statement:** The authors declare no conflicts of interest

**Title:** Results of a practice enhancement opportunity assessment of federally qualified health centers in South Carolina

**Authors:** Heather M. Brandt, Vicki Young, Dayna Campbell, Tisha Felder, Daniela B. Friedman, James R. Hebert

**Abstract:**

Purpose: The purpose was for federally-qualified health centers (FQHC) to conduct a self-assessment of interest in, readiness to, and capacity for conducting research, including collaborative research with academic researchers.

Methods: Twenty FQHCs were contacted to participate in a web-based survey of 39 items to assess general research experience and interest, partnership and funding for research, staffing and ethical review, barriers and benefits to participation in research, training/technical assistance needs, and capacity.

Results: Fourteen FQHCs responded (response rate=70%) and received a \$100 incentive. Of the 14 FQHCs, 71% had previously conducted/participated in research, and 90% were interested in expanding research activities. The most common research partner was other FQHCs (50%). Previous research experiences were categorized as successful/somewhat successful by all respondents (100%). Having engaged FQHC leadership and clearly defined benefits to the FQHC were critical factors in successful research partnerships. Improved patient outcomes and experiences were deemed very beneficial as a motivating factor in research collaboration. The greatest barriers were inequity of budget/resources and lack of dedicated staff time for research activities. Respondents were most interested in training/technical assistance on finding and capitalizing on funding opportunities for research (79%). Respondents reported likely utilization of webinars/online learning (79%) and seminars (79%) for training/technical assistance.

Conclusion: The results are being used to inform future training and capacity building activities for FQHCs and academic researchers and to identify opportunities and promote promising approaches for collaborative research. A follow-up qualitative component with FQHCs is planned to enhance planned activities.

**Contact Information (*corresponding author*):**

Heather M. Brandt, PhD, CHES

University of South Carolina-Arnold School of Public Health

Department of Health Promotion, Education, and Behavior and Cancer Prevention and Control Program

Columbia SC 29208

Tel: 803.576.5649

Email: hbrandt@sc.edu

**Website:** <http://scccprn.sph.sc.edu/>

**Funding Source:** Funding provided to the South Carolina Cancer Prevention and Control Research Network (SC-CPCRn) by the Centers for Disease Control and Prevention and National Cancer Institute-funded Cancer Prevention and Control Research Network (PIs: J Hebert & D Friedman, U48/DP001936-01). The content is solely the responsibility of the authors and does not necessarily represent the official views of the Centers for Disease Control and Prevention and the National Institutes of Health. The SC-CPCRn partnered with the National Association of Community Health Centers (NACHC) and the Clinical and Translational Science Institute at Children's National (CTSI-CN), a joint effort by Children's National Medical Center and The George Washington University, to conduct this survey.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Colorectal cancer information seeking behavior and trusted sources: Opportunities for intervention

**Authors:** Heather M. Brandt, Heather Dolinger, Patricia A. Sharpe, James W. Hardin

**Abstract:**

Purpose: The purpose was to determine colorectal cancer (CRC) information-seeking patterns, frequent and trusted sources of information, and screening practices to inform future interventions to increase participation in CRC screening.

Methods: The study was a cross-sectional, random digit dialed (landline; cell phone numbers) survey using computer-assisted telephone interviews conducted by trained, professional interviewers. South Carolina residents aged 45-75 years were contacted. For this paper, analysis was restricted to participants aged 50-75 (n=1,302) who fell in the age range for CRC screening guidelines. Odds ratios were adjusted for race and gender.

Results: Participants who had ever looked for CRC information (n=415) were significantly more likely to report having a fecal occult blood test (FOBT) (OR=1.65; CI: 1.94, 2.10), flexible sigmoidoscopy (OR=1.5; CI: 1.17, 1.92), colonoscopy (OR=1.66; CI: 1.27, 2.17), or any CRC screening method (OR=2.01; CI:1.44, 2.78). Males were significantly less than females likely to get a colonoscopy (OR=0.71; CI: 0.56, 0.91). There was no significant difference in outcomes by race or geographic location. Most participants sought information on CRC screening from their health care provider (n=339, 82%), reading pamphlets (n=284, 68%), or using the internet (n=228, 55%). The most trusted source was a health care provider (n=266, 64%), followed by the internet (n=54, 13%) and pamphlets (n=32, 8%).

Conclusion: Individuals who had ever looked for information on CRC screening were more likely to have been screened. Main sources of trusted information, particularly health care providers, represent opportunities for intervention to increase saliency of CRC screening to prevent and down-stage CRC. Particular importance to culturally- and literacy-appropriate sources of information should be promoted when addressing CRC disparities.

**Previously Presented At/Published In:** Previously presented at the 139th Annual Meeting of the American Public Health Association in Washington, DC (October 2011).

**Contact Information (corresponding author):**

Heather M. Brandt, PhD, CHES  
University of South Carolina-Arnold School of Public Health  
Department of Health Promotion, Education, and Behavior and Cancer Prevention and Control Program  
Columbia SC 29208  
Tel: 803.576.5649  
Email: hbrandt@sc.edu

**Funding Source:** This research is supported by the Center for Colon Cancer Research (Center of Biomedical Research Excellence) grant (P20 RR17698; PI: Dr. Franklin G. Berger) through a target principal investigator award to Dr. Heather Brandt. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Physician recommendation as a predictor of participation in colorectal cancer screening: A population-based study of South Carolina adults

**Authors:** Heather M. Brandt, Heather Dolinger, Patricia A. Sharpe, James W. Hardin

**Abstract:**

Purpose: The purpose of this study was to examine the association of physician recommendation to colorectal cancer screening (CRC).

Methods: The study was a cross-sectional, random digit dialed (landline; cell phone numbers) survey using computer-assisted telephone interviews. South Carolina residents aged 45-75 years were contacted. For this paper, analysis was restricted to participants aged 50-75 (n=1,302) who fell in the age range for CRC screening guidelines. Odds ratios were adjusted for race and gender.

Results: Participants who reported physician recommendation for CRC screening tests were more likely to have had that test: fecal occult blood test (FOBT) (OR=3.39, CI 2.64, 4.35); flexible sigmoidoscopy (FS) (OR=117.04, CI 77.36, 177.08); colonoscopy (OR=58.36, CI 38.81, 87.76); and any type of CRC screening test (OR=26.32, CI 17.45, 39.72). Those reporting physician recommendation were also more likely to intend to have each test: FOBT in next 12 months (OR=1.92, CI 1.51, 2.47); FS in next five years (OR=2.82, CI 2.19, 3.63); colonoscopy in next 10 years (OR=7.05, CI 5.25, 9.48); and any type of CRC screening test (OR=5.66, CI 3.94, 8.13) compared to those not reporting recommendation. African-American (AA) participants were more likely to report physician recommendation for FOBT (OR=1.57, CI 1.18, 2.09); FS in the next five years (2.97, CI 2.23, 3.96); and more likely to intend to have colonoscopy (OR=1.53, CI 1.07, 2.19) compared to white participants.

Conclusion: Physician recommendation for CRC screening was significantly connected to CRC screening. Intervention efforts to increase physician recommendation are warranted given the significant effect. Findings showing AA participants more often receiving recommendation for FOBT requires additional study to determine the potential role in exacerbating CRC disparities.

**Previously Presented At/Published In:** Previously presented at the 139th Annual Meeting of the American Public Health Association in Washington, DC (October 2011).

**Contact Information (*corresponding author*):**

Heather M. Brandt, PhD, CHES

University of South Carolina

Arnold School of Public Health

Department of Health Promotion, Education, and Behavior and Cancer Prevention and Control Program

915 Greene Street

Columbia SC 29208

Tel: 803.576.5649

Email: hbrandt@sc.edu

**Website:** <http://cccr.sc.edu/>

**Funding Source:** This research is supported by the Center for Colon Cancer Research (Center of Biomedical Research Excellence) grant (P20 RR17698; PI: Dr. Franklin G. Berger) through a target principal investigator award to Dr. Heather Brandt. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Planting Healthy Roots: A Look at the Right Choice Fresh Start Farmers Market: Using documentary film to evaluate and disseminate community-based participatory research

**Authors:** Heather M. Brandt, Darcy A. Freedman, Laura Kissel, Tim Jacobs, Trey Murphy

**Abstract:**

Purpose: The purpose was to produce, disseminate, and evaluate a documentary film featuring the process of forming and implementing a farmers' market at a federally-qualified health center (FQHC) designed to improve consumption of healthy fruits and vegetables to prevent chronic disease and increase economic opportunity for small-scale rural farmers.

Methods: The coalition model of filmmaking consistent with a community-based participatory research (CBPR) approach was used. Two student filmmakers, under the direction of two researchers, senior filmmaker, and Community Advisory Council, used personal stories, community profiles, and expert interviews to describe the formation and implementation of the market in collaboration with an FQHC in rural South Carolina through documentary film. Interactive filming, producing, and editing strategies were used to develop the final version. Two community film screenings in the rural community in which filming took place, one on-campus screening, and one screening at an independent theatre were held.

Results: An 18-minute documentary film was developed that captured the complexities of CBPR specifically applied to implementing an innovative farmers' market. Evaluations collected at the community film screenings demonstrated high levels of approval and satisfaction with the film and CBPR essence of the film. Community members expressed interest in using the film as a marketing tool. More than 400 copies of the DVD have been requested throughout the United States and around the world.

Conclusion: Documentary film has proven to be an appropriate method to use in conjunction with CBPR approaches to document, evaluate, and disseminate process and results.

**Previously Presented At/Published In:** Previously presented at the University of South Carolina Science and Health Communication Research Group (December 2011)

**Contact Information (*corresponding author*):**

Heather M. Brandt, PhD, CHES

University of South Carolina-Arnold School of Public Health

Department of Health Promotion, Education, and Behavior and Cancer Prevention and Control Program

Columbia SC 29208

Tel: 803.576.5649

Email: hbrandt@sc.edu

**Website:** <http://sccpcrn.sph.sc.edu/>

**Funding Source:** This film was supported by funding from the University of South Carolina Science and Health Communication Research Group and the farmers' market research project was supported by the South Carolina Cancer Prevention and Control Research Network funded under Cooperative Agreement Number 3U48DP001936-01W1 from the Centers for Disease Control and Prevention and the National Cancer Institute.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Kidney Transplant Disparity in South Carolina

**Authors:** Teri Browne, Olivia Jones, Lesley Jacobs, Cassandra Avant-Williams, Valerie Stiling, Sonya Davis-Kennedy, Felix Weston, Jennifer Worthington, and Cassidy Shaver

**Abstract:**

In the United States, black hemodialysis patients are significantly less likely than white patients to be evaluated and listed for a kidney transplant (the preferred treatment modality for kidney failure). In the entire state of South Carolina, in 2011 only 6 patients received a living donor kidney transplant despite more than 6,000 patients being on dialysis (compared to the 20 white patients who received such a transplant out of the 2,144 white patients on dialysis). Surveying 228 black hemodialysis patients, the following research questions were addressed using an original survey: (1) What is the role of social networks in providing information about kidney transplantation to black hemodialysis patients? (2) What is the relationship between social networks and a patient's likelihood of being seen at a kidney transplant center?

**Results:** 94% of patients surveyed were interested in a kidney transplant, and 98% percent had insurance that would pay for a kidney transplant, but only 9% were active on a transplant waiting list. Black hemodialysis patients with lower incomes were less likely to be seen at a kidney transplant center (OR 1.38, 95%CI: 1.09-1.76,  $p < .01$ ), and patients who have people in their social network with information about kidney transplant are significantly more likely to be seen at a kidney transplant center. Specifically, black dialysis patients who get informational social support from their dialysis team (OR 1.76, 95%CI: 1.5-2.1,  $p < .001$ ) and social networks (OR 1.63, 95%CI: 1.2-2.3,  $p < .001$ ) are significantly more likely to be seen at a kidney transplant center. Our research team is replicating this research in South Carolina, in order to recommend meaningful interventions that can help kidney disease communities in our state.

**Contact Information (corresponding author):**

Teri Browne, PhD, MSW  
Assistant Professor  
University of South Carolina College of Social Work  
Columbia, SC 29208  
phone: 803-777-6258  
fax: 803-777-3498  
browne@sc.edu

**Funding Source:** Research funded through NIH NIDDK Award no. R15DK088707

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Diet & Activity Community Trial: High-Risk Inflammation

**Authors:** Ruby Fore Drayton, MBA, Briana Davis, MPH, Lisa Davis, MEd, James Hebert, MSPH, ScD

**Abstract:**

South Carolina (SC) has some of the largest health disparities in the nation, and the most dramatic of these are associated with elevated cancer rates among African Americans (AA). In response to this public health challenge, the South Carolina Cancer Disparities Community Network (SCDCN) was formed. The SCDCN is a partnership between the University of South Carolina, Clemson University, Insights Consulting, and the State Baptist Young Woman's Auxiliary (YWA) of the Woman's Baptist Education and Missionary Convention of SC. This proposal was developed through the SCDCN to create a community-based participatory research (CBPR) project aimed at addressing problems of cancer and other chronic diseases in AAs in SC; all of which can be traced to chronic, unresolved inflammation. It is known that diet and physical activity (PA) affect metabolic functioning. When imbalanced rates of obesity increase, the likelihood of metabolic syndrome and diabetes increases. We know that diabetes increases both cardiovascular diseases and many cancers. We also know that dietary and PA intervention effects are difficult for individuals to maintain. Evidence shows that group-based family-centered, multi-component interventions are effective in creating changes related to diet outcomes. The goal of this project is to reduce chronic inflammatory states related to health disparities by these Primary Aims:

1. To conduct awareness, education programs in the faith-based community focusing on chronic inflammation, cancer and other chronic diseases;
2. To conduct an intervention designed by the faith-based community and USC scientists to identify factors associated with increased inflammation; and
3. To study the effectiveness of a community-designed, family-based dietary and PA intervention aimed at modifying levels of inflammatory markers associated with risk of cancer and chronic diseases. Because of the CBPR nature, a Secondary Aim was identified to test the effectiveness of the dietary and PA intervention on other outcomes important to our community.

**Contact Information (*corresponding author*):**

Ruby F. Drayton, MBA-Field Coordinator  
Community Clinical Trial Team  
Cancer Prevention & Control Program  
Columbia SC 29208  
803-576-5647  
draytonr@mailbox.sc.edu

**Website:** <http://cpcp.sph.sc.edu/>

**Funding Source:** The Community Clinical Trials Team Project is supported by the National Institutes of Health, National Center on Minority Health and Health Disparities, GRANT # (1R24MD002769-01). Principal Investigator: James R. Hebert, MSPH, ScD.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Prevalence of oral antineoplastic agent use among Medicaid enrollees diagnosed with breast cancer: 1998-2008

**Authors:** Tisha Felder, PhD, MSW; Dana Stafkey-Mailey, PharmD, PhD; Charles L. Bennett, MD, PhD, MPP

**Abstract:**

This study examined the prevalence of oral antineoplastic agent use among a population-based, retrospective cohort study of women diagnosed with breast cancer from 1998-2008 using the South Carolina Central Cancer Registry linked with Medicaid pharmacy claims. We used frequencies and means  $\pm$  standard deviations, as appropriate, to describe enrollees, and Student's t and chi-square tests to compare enrollees by use of oral agents. From 1998-2008, a total of 7,232 Medicaid enrollees with a primary cancer of the breast and at least one medical claim for any form of breast cancer treatment were identified. The final sample consisted of 7,141 participants, as we excluded duplicate cases (n=5) and those racially classified as "Other" (n=86). On average, enrollees were 63 years old (SD=16yrs) at the time of cancer diagnosis and 45% (n=3,207) were diagnosed at a localized stage. The majority of enrollees were white (n=3,902; 54.6%) and from urban areas (4,865; 68.1%). Forty-percent (n=2,851) of enrollees had one or more pharmacy claims for receipt of an oral antineoplastic agent, receiving a total of 48,969 oral agents classified as antineoplastics during the study period. The most commonly received agents, tamoxifen (n=27,802), anastrozole (n=9,828) and letrozole (n=7,221), accounted for 92% (n=44,851) of all oral agents. Compared to non-users, enrollees who used oral agents were younger at the time of diagnosis (65 vs 61yrs,  $p<0.0001$ ), Black (44.1% versus 47.3%,  $p=0.008$ ), and diagnosed at a regional stage (20.5% vs 29.9,  $p<0.001$ ). Preliminary findings suggest that there are racial/ethnic, age, and clinical stage differences between users of oral antineoplastic agents versus non-users. Future planned analyses include determining if race/ethnicity is independently associated with the prevalence of oral antineoplastic agent use after adjusting for patient (e.g., co-morbidities), clinical (e.g., provider characteristics) and health delivery factors (e.g., where care is delivered).

**Previously Presented At/Published In:** MUSC 2012 Breast Cancer Retreat

**Contact Information (corresponding author):**

Tisha Felder, PhD, MSW  
Health Outcomes Postdoctoral Fellow  
Department of Clinical Pharmacy and Outcomes Sciences,  
South Carolina College of Pharmacy  
Cancer Prevention & Control Program  
Arnold School of Public Health  
Columbia, South Carolina 29208  
Phone: 803.576.5646  
Email: feldert@sccp.sc.edu

**Funding Source:** PhRMA Foundation Health Outcomes Postdoctoral Award

**Conflict of Interest Statement:** The authors declare no conflicts of interest



**Title:** The Right Choice Fresh Start Farmers' Market: A Multidimensional Farm-to-Health Center Intervention

**Authors:** Darcy A. Freedman, PhD, Kassy Alia, Lucy Willms, MSW, Vicki M. Young, PhD, Heather M. Brandt, PhD, Daniela B. Friedman, PhD, & James R. Hébert, ScD.

**Abstract:**

Farmers' markets are environmental interventions that increase access to produce. Few farmers' market are purposefully designed to serve low-income consumers; populations that are disparately affected by obesity and food insecurity. The Right Choice Fresh Start Farmers' Market was developed in collaboration with a federally qualified health center, Family Health Centers, Inc. (FHC) in Orangeburg, SC, to increase access to produce and improve diet among low-income consumers while also increasing economic opportunity for small-scale rural farmers. The farmers' market intervention is based on a multidimensional theory of food access; it includes intervention components focused on economic, service delivery, spatial, social, temporal, and personal aspects of food access. Economic access was addressed through three voucher programs that reduced the cost of produce at the market, point-of-purchase food stamp access, and acceptance of farmers' market food subsidies by participating vendors. Service delivery factors included having a wide variety of high quality produce for sale, a setting that was clean and organized, and staff that treated customers with respect. Spatial access was addressed by locating the farmers' market at the health center, near a bus stop, and along a busy thoroughfare near multiple businesses, schools, and residential areas. Social access was addressed by developing the market in collaboration with a community advisory board that sought regular feedback from key stakeholders (consumers and farmers), organizing social events at the market (e.g., health fairs, celebrations), and through efforts to make the market a communal space that is welcoming to all. Temporal access was addressed by having the market on a Friday (one of the busiest days at the health center) during hours that were recommended by the community. Personal access was addressed by providing nutrition-related knowledge at the market (e.g., recipes, health information). The multiple component environmental intervention operated for 22 weeks from June-October 2011.

**Contact Information (corresponding author):**

Darcy A. Freedman  
Assistant Professor, Social Work  
Columbia SC, 29208  
Tel: (803) 777.1326  
E-mail: darcy.freedman@sc.edu

**Funding Source:** Centers for Disease Control and Prevention and National Cancer Institute-funded Cancer Prevention and Control Research Network U48/DP001936-01W1 (PI: J.R. Hébert, ScD; Co-PI: D.B. Friedman). Dr. Hébert also was supported by an Established Investigator Award in Cancer Prevention and Control from the Cancer Training Branch of the National Cancer Institute (K05 CA136975).

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** The South Carolina Cancer Prevention and Control Research Network: A Collaboration of Researchers, Federally Qualified Health Centers, and Community Partners

**Authors:** Daniela B. Friedman, Msc, PhD, Vicki M. Young, PhD, Darcy A. Freedman, PhD, Swann Arp Adams, PhD, Heather M. Brandt, PhD, CHES, Tisha M. Felder, PhD, MSW, Sudha Xirasagar, MBBS, PhD, Leepao Khang, MPH, Dayna A. Campbell, MS, John R. Ureda, DrPH, Thomas G. Hurley, MS, James L. McCracken, MA, and James R. Hébert, ScD.

**Abstract:**

The South Carolina Cancer Prevention and Control Research Network (SC-CPCRN), one of 10 CDC/NCI-funded Cancer Prevention and Control Research Networks across the nation, works to accelerate the adoption of evidence-based cancer prevention and control initiatives among vulnerable populations whose disparities are well documented and with whom we have used community-based participatory research (CBPR) methods to identify and address issues of greatest concern. Drawing on the experience of University of South Carolina-based faculty and staff committed to CBPR and the South Carolina Primary Health Care Association (SCPHCA) and Federally Qualified Health Centers (FQHCs), key project partners, the SC-CPCRN works collaboratively with all funded CPCRN-funded institutions. Grant activities being conducted include: training and technical assistance regarding program dissemination and implementation; supporting community development and sustainability initiatives through a community-based mini-grants program to disseminate and implement evidence-based interventions; conducting evaluations to gauge FQHCs' readiness and capacity for health/cancer-related research collaborations; establishing a data-sharing plan between the Cancer Prevention and Control Program (CPCP), SCPHCA, the FQHCs, and the SC Office of Research and Statistics (ORS); and using innovative geospatial methods to explore geographic distance from patients' residence to the FQHCs and neighborhood characteristics. The SC-CPCRN cultivated a unique relationship with the Family Health Centers Inc. in Orangeburg SC and developed a local farmers' market at the community health center location, an innovative strategy for increasing access to healthy foods, improving diet and encouraging more sustainable lifestyle changes in high-risk South Carolina communities. A farmers' market documentary DVD has been created and distributed worldwide as part of the SC-CPCRN's dissemination efforts. In addition to these efforts, the SC-CPCRN shares expertise and insights with the national CPCRN group by providing leadership to national workgroups aimed at enhancing FQHC relationships throughout the country to improve dissemination and implementation research.

**Contact Information (*corresponding author*):**

Daniela B. Friedman, Msc, PhD-Assistant Professor,  
Health Promotion, Education, and Behavior-Arnold School of Public, Health University of South Carolina  
800 Sumter Street, 220B, Columbia SC, 29208  
Tel: (803) 777.9933; Fax: (803) 777.7096  
E-mail: dfriedma@mailbox.sc.edu  
**Website:** <http://sccpcrn.sph.sc.edu/>

**Funding Source:** Centers for Disease Control and Prevention-Prevention Research Centers; Centers for Disease Control and Prevention and National Cancer Institute-funded Cancer Prevention and Control Research Network U48/DP001936-01W1 (PI: J.R. Hébert, ScD; Co-PI: D.B. Friedman). Dr. Hébert also was supported by an Established Investigator Award in Cancer Prevention and Control from the Cancer Training Branch of the National Cancer Institute (K05 CA136975). James Lyndon (Lyn) McCracken, MA, Project Coordinator.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Reducing Cancer Health Disparities through Community Engagement, Research, and Training: the South Carolina Cancer Disparities Community Network-II

**Authors:** Hebert, JR; Adams,SA; Armstead CA; Brandt HM; Broderick,ME; Friedman,DB

**Abstract:**

Cancer health disparities among African Americans in South Carolina are among some of the greatest in the nation and world. Community-engaged approaches combined with novel interdisciplinary research and training strategies are critical to engaging the African-American community in efforts to reduce cancer health disparities to improve health outcomes.

The South Carolina Cancer Disparities Community Network-II's (SCCDCN-II) goals are to contribute materially to: understanding the underlying causes of cancer-related health disparities; developing effective innovations to lower incidence, improve survival, and reduce suffering; delivering innovations to high-risk populations; and moving to widespread dissemination. Our goals are being realized by:

1. Increasing the knowledge base to understand which biomedical and behavioral procedures are most likely to prevent and control cancer in African-American communities;
2. Developing and testing interventions that are likely to reduce cancer incidence, downstage disease at time of diagnosis, increase longevity, and improve quality of life in people with cancer;
3. Delivering proven, effective interventions to places of greatest receptivity and public health need and to evaluate them in terms of generalizability; and
4. Disseminating results from successful interventions in the form of interventions and collaborations with national partners to determine universal elements that will work in most places and to discern essential elements that are more place- and culture-specific.

The success of SCCDCN-II is predicated on: dedication to community-based participatory research; understanding that the philosophical underpinnings and practical methods of applying knowledge are transparent across interdisciplinary, translational and community-based participatory research; that the missions of research, education, and service are inseparable and interdependent; and that training of the next generation of scientists must be dedicated to the highest ideals of community-based participatory, interdisciplinary, and translational research. The SCCDCN-II consists of four cores: administrative, research, community outreach, and training to operationalize our goals and realize reductions in cancer health disparities.

**Contact Information (*corresponding author*):**

Madeline Broderick, Program Manager  
Cancer Prevention & Control Program, 915 Greene St., Second Floor  
Columbia, SC 29208  
Telephone: (803)576-5669  
Email: madeline@mailbox.sc.edu  
**Website:** <http://sccdcn.sph.sc.edu>

**Funding Source:** The SCCDCN-II is funded under a cooperative agreement with the National Cancer Institute's Center to Reduce Cancer Health Disparities (U54CA153461); PI: Dr. James R. Hebert. Program Partners include the Clemson University, Gibbs Cancer Center, Insight Consulting McCleod Health Regional Medical Center, South Carolina Primary Health Care Association and the State Young Woman's Auxiliary Health Ministry.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** ENLACE Pilot Study: A Community-Based Participatory Research Initiative to Enhance Physical Activity in Mexican-Origin Women in South Carolina

**Authors:** DeAnne K. Hilfinger Messias, Patricia A. Sharpe, Deborah Parra-Medina, Daisy Morales-Campos, and Jennifer Salinas

**Abstract:**

Regular physical activity is associated with the prevention and control of diabetes and obesity, cardiovascular disease, and certain cancers. The rising rates of diabetes and obesity prevalence rates among Mexican-origin Hispanics signals the need for low cost, culturally and linguistically appropriate interventions to increase moderate intensity physical activity among this population. The ENLACE pilot study was a group randomized trial with repeated measures designed to evaluate the effect of a community-based intervention to increase moderate intensity physical activity among Mexican-origin women living the South Carolina Midlands. The intervention was a Spanish-language program delivered by two promotoras (lay health advisors) who also provided input and participated in the planning and implementation of the various research phases. Each promotora recruited two groups of 15 Mexican-origin women from her local community networks to enroll in the pilot program. Following baseline assessments, groups were randomized to intervention or wait-list control status. Randomization was balanced within promotora, that is for each promotora one group was intervention the other was wait-listed. The promotoras delivered the 8-week physical activity program in Spanish to the intervention group. Follow-up assessments occurred at 14 weeks, after which the promotoras conducted the intervention with the wait-listed groups. A sample consisted of 59 Mexican-origin women. The mean age was 32 years; mean years of completed education was 8.8; and 34% were currently employed. We used the Community Health Activities Model Program for Seniors (CHAMPS) physical activity questionnaire to measure self-reported minutes-per-week of moderate to vigorous physical activity (MVPA). Follow-up assessments indicated intervention group participants had significantly higher levels ( $p=.05$ ) of total MVPA and leisure time MVPA than controls. Findings from this pilot study suggest that community-based, culturally and linguistically tailored promotora-delivered interventions may contribute to enhancing physical activity levels among Mexican-origin Latinas.

**Contact Information (corresponding author):**

Deanne K. Hilfinger Messias, PhD, RN, FAAN  
Professor College of Nursing and Women's and Gender Studies  
University of South Carolina  
1601 Greene Street  
Columbia SC 29208  
803-777-8423  
deanne.messias@sc.edu

**Funding Source:** The project described was supported by Award Number R21HL087765 from the National Heart, Lung, and Blood Institute in response to PAR-05-026 Community Participation in Research.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** La Iniciativa Latina contra el Cáncer: Promotora-Delivered Community Outreach to Address Cervical and Breast Cancer Health Disparities in the South Carolina Midlands

**Authors:** DeAnne K. Hilfinger Messias, Heather M. Brandt, Anna Walton, Micah Sorum, Catherine Hardin

**Abstract:**

The South Carolina Hispanic/Latino Health Coalition's Iniciativa Latina contra el Cáncer (Latina Initiative) addresses cancer disparities among Latinas through implementation of a culturally and linguistically appropriate program to reduce the number of Latinas who go unscreened for breast and cervical cancer in the South Carolina Midlands. Latinas have low rates of cervical cancer screening and subsequently cervical cancer rates twice those of non-Hispanic White women in the US; breast cancer is the leading cause of cancer-related death among Latinas. The Latina Initiative trains and supports Latina promotoras (lay health educators) to conduct community health education sessions for small groups of women and provide individualized referrals and navigational support for breast and cervical cancer screening. The educational sessions are based on the South Carolina Cancer Alliance Spanish-language Cancer Education Guide and include a short pre and post-test of cancer knowledge, attitudes, and beliefs. As of March 2012, nine trained Latina Initiative promotoras have conducted 80 community presentations, providing direct cancer education and navigational support for 592 women. Depending on age, health history, and income levels, participants are referred for appropriate cancer screening services. The short-term aims are to increase knowledge, motivation, and self-efficacy related to personal cancer prevention behaviors and to increase participation in appropriate breast and cervical cancer screening. The long-term aim is to contribute to decreasing breast and cervical cancer disparities. To date, follow-up contacts indicate that over 60% of the participants have scheduled an appointment or completed cancer screening. The Latina Initiative promotoras continue to document significant barriers to cancer screening among this population, including lack of insurance, cost of care, lack of transportation, limited English proficiency, and fears related to immigration status. Further collaborative efforts and partnerships are needed to address these barriers to access.

**Previously Presented At/Published In:**

**Contact Information (corresponding author):**

DeAnne K. Hilfinger Messias, PhD, RN, FAAN-Professor  
College of Nursing and Women's and Gender Studies  
University of South Carolina  
1601 Greene Street, Columbia, SC 29208  
deanne.messias@sc.edu  
803-777-8423

**Funding Source:** South Carolina Cancer Alliance and American Cancer Society.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Differential Gene Expressions in Breast Cancer Epithelia of African American and European American Women: Health Disparity at the Gene Array Level

**Authors:** Khirston Howard, Leslie A. Johnson, and Omar Bagasra

**Abstract:**

Mortality rates from breast cancer remain higher in African-American women (AAW) despite a lower incidence when compared to European American women (EAW). Multiple factors including differences in access to health care, disparate utilization of screening tools as well as biologic factors are being explored as causative agents. We are addressing this concern by studying the expressions of breast cancer-estrogen receptor signaling pathway genes paired with primary breast cancer cell lines of AAW and EAW patients. By utilizing the breast cancer array, we show that there were nine genes which were up-regulated in both races including: BAD, BAG1, CCNE1, IL6R, IL6ST, ITGB4, MAP2K7, PLAU and PTGS2. However, there were numerous genes that were differentially expressed between the two racial groups. In AAW the following genes were up-regulated: CDKN2A, CLDN7, CTNNB1, CTSD, EGFR, ESR1, HMGB1, KRT18, STC2 and TP53. One which was most significant is the up-regulation of ESR1, the estrogen receptor 1 gene that is considerably up-regulated and may play an important role in AAW breast cancer development. There were eight genes that were differentially expressed in EAW. These include: CCD1, FOSL1, GSN, IL2RA, IL6, ITGA6, NFYB and SLC7A. Some of these differentially expressed genes may play a protective role in EAW. In addition to the comparative array, we also tested the hypothesis that Zinc transporter-LIV-1 plays a pivotal role in zinc homeostasis in the breast and may be an important cofactor in breast cancer development. Therefore, we treated our cell lines with zinc chelator-TPEN, and array analyses showed differential gene up-regulations of nine genes in zinc depleted cells of AAW as compared to EAW. These findings may help us discover that molecular basis of high breast cancer mortality in AAW and may help in the development of biomarkers and in early diagnosis of breast cancer.

**Contact Information (corresponding author):**

Omar Bagasra MD, PhD  
Claflin University  
400 Magnolia Street  
Orangeburg, SC 29115  
obagasra@claflin.edu  
803-535-5253

**Funding Source:** DoD/CDMRP (PC074307)

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Assessing Prostate Cancer Educational Materials for Readability, Suitability, and Content

**Authors:** Calvin James, MPH; Deloris Williams, PhD, MSN, RN; John Ureda, Dr.PH; Dolores Scott, MEd; Kimberly Comer, MPH; Candra Chaisson; Heather Brandt, PhD, CHES

**Abstract:**

**BACKGROUND & PURPOSE:** Prostate cancer (PrCA) screening is controversial as reflected in the most recent guidelines of the U.S. Preventive Services Task Force. Many medical professionals and health care agencies are providing African Americans with printed PrCA screening educational materials to promote informed decision making. The purpose of this study was to evaluate commonly used printed PrCA screening educational materials for readability, suitability (including cultural appropriateness), and PrCA screening content.

**METHODS:** Materials were identified through a web-based search and through review of national agencies and organizations' materials. Readability of selected PrCA screening materials was assessed using the Simple Measure of Gobbledygook (SMOG), Fry Method, Flesch-Kincaid (FK), and Flesch Reading Ease (FRE). Suitability was assessed using the Suitability Assessment of Materials (SAM). PrCA content was evaluated using a tool created by the authors based on PrCA informed decision-making recommendations.

**RESULTS:** Thirty-three PrCa screening materials were identified from nine health agencies and analyzed by three trained evaluators. The SMOG reading level estimates of the materials ranged from grade 5.1-15.4, with a mean reading grade level of 15.5. The mean FRE score of 54.2 yielded a FK mean reading grade level of 10.1 with a FRY of 11.4. SAM ratings showed that 75.8% of the materials were categorized as "not suitable" for African Americans with 91% of the materials being written for a generic audience. Of content items assessed, a mean score of 77.3% indicated the presence of content specific PrCa screening themes within each material.

**CONCLUSION:** Although, PrCa content themes were fairly consistent across educational materials, high levels of readability and inadequate suitability for African Americans may hinder utilization and meaning for African American populations. These results highlight the need for prostate cancer education efforts that consider readability and cultural appropriateness in the design of cancer screening and prevention materials.

**Contact Information (corresponding author):**

Calvin L. James, MPH  
University of South Carolina  
Cancer Prevention and Control Program  
Tel: 803.777.1110  
Email: JamesCL4@sc.edu

Deloris Williams, PhD, MSN, RN  
State Baptist Young Woman's Auxiliary of the Woman's Baptist Educational and Missionary Convention,  
PO Box 27,

Columbia SC 29202, Tel:803-988-1014,  
Carolinanet05@aol.com

John Ureda, DrPH,  
Insights Consulting, Inc,  
2728 Wilmot Ave.  
Columbia, SC 29205-2541  
Tel: 803 765-2010,  
Email: jureda@sc.rr.com

Doloris Scott, Med  
State Baptist Young Woman's Auxiliary of the Woman's Baptist Educational and Missionary Convention  
PO Box 27, Columbia SC 29202  
Tel:803-988-1014  
Email: scottfamily\_5@hotmail.com

Kimberly Comer  
University of South Carolina Cancer Prevention and Control Program  
915 Greene Street, Columbia SC 29208  
Tel: 803.576.5691  
Email: COMERKD@mailbox.sc.edu

Candra Chaisson  
University of South Carolina Cancer Prevention and Control Program,  
915 Greene Street, Columbia SC 29208  
Email: chaissoc@email.sc.edu

Heather M. Brandt, PhD, CHES  
University of South Carolina  
Arnold School of Public Health Cancer Prevention and Control Program  
915 Greene Street  
Columbia SC 29208  
Tel: 803.576.5649  
Email: hbrandt@sc.edu

**Conflict of Interest Statement:** The authors declare no conflicts of interest.



**Title:** Human Zinc Transporter 1 (hZIP1) Plays a Role in Zinc Regulation in Prostate Cancer Pathogenesis and is Significantly Down-regulated in African American Men as compared to European American in Prostate Glands

**Authors:** Leslie A. Johnson, Andrea' Kajdacsy-Balla, Joseph P. Pestaner, and Omar Bagasra

**Abstract:**

Zinc (Zn) is essential for a variety of cellular functions but is also potentially toxic. Zn homeostasis is tightly maintained by a variety of transporters and proteins in distinct cellular and subcellular compartments. Zn influx is mediated by the ZIPs, and Zn efflux is by the ZnTs. In the prostate epithelial cell, the accumulation of high cellular zinc is mainly regulated by 3 ZIPs- ZIP1-3. The loss of Zn accumulation is the most consistent and persistent characteristic of prostate malignancy. Currently, there are no direct methods to determine the relative Zn levels in various cell types of prostate gland (i.e. stroma, glandular epithelia, acini, and muscular) and no reliable ways to compare the Zn in normal vs. malignant areas of the gland. By utilizing a differential Zn staining method that correlates with Zn levels at various stages of prostate cancer development in situ and by in situ RT-PCR that correlate with the relative ZIP1 expression levels, we were able to determine that: (1) the relative Zn levels are very low to absent in the malignant glands, (2) normal glands show high Zn levels in both glandular epithelia as well as in stromal tissues, (3) the Zn levels begin to decrease in pre-malignant glands and precedes the development of malignancy, (4) the expression of human Zn transporter1 (hZIP1) appears to correlate with the Zn levels in the prostate glands and may be the major Zn regulator in this organ and (5) the Zn levels as well as hZIP1 expression levels are significantly lower in the prostate glands of African American men (AAM) as compared to age-and tumor grade (Gleason score)- matched European American men (EAM). In conclusion we show that hZIP1 function like tumor suppressor gene in prostate cancer development and it plays more significant role in AAM than in EAM.

**Contact Information (corresponding author):**

Omar Bagasra MD, PhD  
Claflin University  
400 Magnolia Street  
Orangeburg, SC 29115  
obagasra@claflin.edu  
803-535-5253

**Funding Source:** DoD/CDMRP (PC074307)

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Evaluating the Effectiveness of Partnerships: A Social Network Analysis of the South Carolina Cancer Disparities Community Network-I

**Authors:** Katherine H. Leith, PhD, LMSW <sup>1</sup>, Heather Brandt, PhD, CHES <sup>2</sup>, John R. Ureda, DrPH <sup>3</sup>, Deloris Williams, RN, BSN, MSN, PhD <sup>4</sup>, Dolores Scott, MEd <sup>5</sup>, Rachel Mayo, PhD <sup>6</sup>, Kimberly Comer, MPH <sup>7</sup>, Ruby Drayton, MBA, LPN <sup>8</sup>, James R. Hebert, ScD <sup>9</sup>.

(1) Center for Health Services and Policy Research, University of South Carolina, (2) Arnold School of Public Health, University of South Carolina, Cancer Prevention & Control Program, (3) Insights Consulting, (4) Carolina Community Based Health Supports Networks, (5) Woman's Baptist Education and Missionary Convention, State Baptist Young Woman's Auxiliary, (6) Department of Public Health Sciences, Clemson University, (7) Cancer Prevention and Control Program, University of South Carolina, (8) Cancer Prevention and Control Program, University of South Carolina, (9) Cancer Prevention and Control Program, University of South Carolina

**Abstract:**

**Background:** This analysis was designed to assess the success of the South Carolina Cancer Disparities Community Network (SCCDCN-I) in establishing effective partnerships that address cancer disparities among African Americans. Specifically, the analysis evaluated various characteristics of the partnership ties between the SCCDCN and its community partners.

**Methods:** A Likert-style survey assessed partnerships along seven dimensions: (1) type – who is this partner; (2) value – how important is this partner; (3) actual strength – how tight are partner ties; (4) desired strength – how tight should ties be; (5) actual extent – how formal is partnership; (6) desired extent – how formal should partnership be; and (7) satisfaction – how satisfying is partnership. The survey was transferred to SurveyMonkey and pilot-tested. Snowball sampling was used to identify respondents. Wave 1 respondents were members of the SCCDCN-I core team. Wave 2 and 3 respondents were community partners identified during Wave 1. Although most Wave 1 respondents completed the survey, many Wave 2 and 3 respondents did not. By Wave 3, respondents no longer “recognized” the SCCDCN-I.

**Results:** Respondents identified the same partners; these were predominantly academic institutions and large health-related, community-based, or non-governmental organizations. Wave 2 and 3 respondents identified few faith-based organizations. Most partners were located within South Carolina and were geographically close to the setting of the SCCDCN-I.

**Implications:** The SCCDCN-I has established strong partnerships with its community partners. Partners view the work of the SCCDCN as important and as worthwhile of support. They also find them mutually satisfying and meaningful. These community partnerships are integral to the success of the SCCDCN-I.

**Next Steps:** Efforts are needed to establish stronger partnerships with faith-based community organizations across the state to increase reach and to connect partners on the local level, so that cancer disparities are addressed fully and effectively.

**Previously Presented At/Published In:** Currently submitted for presentation at APHA

**Contact Information (corresponding author):**

Katherine H. Leith, PhD, LMSW  
University of South Carolina- Center for Health Services and Policy Research  
Columbia, SC 29208  
[leith@sc.edu](mailto:leith@sc.edu)  
803-777-5614

**Funding Source:** The project described was supported by Grant Number U01CA114601 from the Center to Reduce Cancer Health Disparities of the National Cancer Institute. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer Institute or the National Institutes of Health.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Disparities in Adult Access to Care, Insurance Coverage, Health Behaviors, and Quality of Diabetic Care in the Delta region of the United States (2009)

**Authors:** Deshia Leonhirth, M.B.A. and Amy Brock Martin Dr.P.H.

**Abstract:**

**Background:** The Economic Development Administration has considered the Delta region of the U.S. the most distressed area of the country, allocating the region approximately \$13 million in funding. This study examines differences in adult access to care, insurance coverage, health behaviors, and quality of diabetic care to understand how to address this distressed region's needs.

**Methods:** Self-report data from the 2009 Behavioral Risk Factor Surveillance System were linked with the 2009 Area Resource File. Bivariate analyses were conducted using chi-square significance tests.

**Results:** Delta adults (21.4%) self-reported fair-poor health status compared to 18.2% non-Delta rural and 15.1% non-Delta urban ( $p<.05$ ). Delta adults (18%) were more likely ( $p<.05$ ) to report being uninsured than non-Delta rural (17.1%) and non-Delta urban (14.8%). Delta adults (17.3%) were more likely ( $p<.05$ ) to report deferring care due to cost than non-Delta rural (15.5%) and non-Delta urban (14.6%). Delta adults were more likely ( $p<.05$ ) to report being obese/overweight (69.3%) and less likely ( $p<.05$ ) to report physical activity (39.2%) than non-Delta rural (67.2%; 45.5%) and non-Delta urban (62.9%; 45.7%). Black and white Delta adults were more likely ( $p<.05$ ) to self-report being obese/overweight and less likely to report any level of physical activity compared to non-Delta rural and urban. Delta adults (11.1%) were more likely ( $p<.05$ ) to report differences in diabetes prevalence than non-Delta rural (9.9%) and non-Delta urban (8.7%). Delta adults self-report of annual diabetic exam was similar across geographic areas, but diabetic annual foot and dilated eye exams varied ( $p<.05$ ).

**Conclusion:** For many indicators, Delta adults parallel rural disparities: obesity and overweight among whites and blacks, physical activity level, and quality-of-care measures. However, Delta adults fare worse than non-Delta rural and non-Delta urban in self-reported health status, insurance status, and diabetic care. It is vital that these disparities remain forefront of policy to address this distressed region.

**Previously Presented At/Published In:** Academy Health, June 2012

**Contact Information (corresponding author):**

Deshia Leonhirth, MBA  
South Carolina Rural Health Research Center  
220 Stoneridge Dr. Ste. 204, Columbia, SC 29210  
Deshia8@yahoo.com  
**Website:** <http://rhr.sph.sc.edu/index.php>

**Funding Source:** Funded by the Office of Rural Health Policy Grant UIC RH 03711

**Conflict of Interest Statement:** The authors declare no conflicts of interest

**Title:** Healthcare resource disparities among persons living with HIV and AIDS (PLWHA)

**Authors:** Deshia Leonhirth, MBA, Medha Vyavaharkar, MD, PhD, MPH, DNB, DGO, DFP, Jan Probst, PhD, Sandra Glover, PhD

**Abstract:**

Background: Many persons living with HIV and AIDS (PLWHA) face challenges in accessing healthcare. Lack of providers who accept and treat PLWHA contributes partly to inconsistent utilization of healthcare services among PLWHA. Ryan White (RW) medical providers offer primary care and referral services to PLWHA irrespective of insurance status or ability to pay. This study examined rural-urban differences in availability of RW medical providers. Methods: Data on prevalence of HIV/AIDS and RW providers were extracted from publically available state surveillance reports and an on-line search tool available on the Health Resources and Service Administration's website respectively. The states that provided county-level information on HIV/AIDS prevalence (28 states; 2,172 counties) were included in this 2008 cross-sectional analysis. The dependent variable was presence of at least one RW provider in a county. The independent variables included prevalence of HIV/AIDS, rurality, and percent of population: below poverty, minority, African American and uninsured. Results: More than 14% of PLWHA live in counties without a RW medical provider. Higher proportion of rural PLWHA (74.8%) lived in counties lacking a RW medical provider compared to urban PLWHA (11.0%). Adjusting for prevalence of HIV/AIDS, percent population: below poverty, minority, African American and uninsured, urban counties had almost 5 times the odds of having a RW medical provider than rural ( $p < .0001$ ). Conclusion: Findings highlight rural-urban resource disparities for PLWHA. There is urgent need to consider and implement policies that would help improve safety net access for PLWHA living in rural counties.

**Contact Information (corresponding author):**

Deshia Leonhirth,  
University of South Carolina  
South Carolina Rural Health Research Center  
deshia8@yahoo.com, 8032516317

**Funding Source:** Study funded by the Office of Rural Health Policy

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Assessing unmet reproductive health needs for women in shelters

**Authors:** Kathryn J. Luchok, Shannon Staley, and Kerry McLoughlin

**Abstract:**

Background: Interest is increasing in the intersection between intimate partner violence and reproductive health. Women seeking shelter have reproductive needs, but access to reproductive services is severely limited, leading to disparities in health care access and outcomes. Taking control of one's reproductive destiny can be a first step to taking back control from an abuser.

Objective: Assess clients' unmet needs and barriers to services; shelter staffs' understanding of women's needs and staffs' own professional development needs.

Methods: Conducted in-person semi-structured interviews with even numbers of rural and urban women using shelter services (16) and female shelter staff (10). Ten clients were African-American, 4 white and 1 Hispanic. Five staff were African-American, 4 white and 1 Hispanic. Interviews were transcribed verbatim, and entered in NVIVO, a textual data management system. Transcripts were coded, with comparative cross-analyses to find common themes, present a narrative of women's experiences, and look for divergence and agreement from the perspectives of women and shelter staff.

Results: Acute needs identified by women included unplanned pregnancies, exposure to STIs, reproductive coercion, and lack of information, but these needs were not being consistently addressed. These issues seemed most striking in women who had few financial resources irrespective of their race or ethnicity. Staff felt asking about these issues would be intrusive, other needs were more pressing and that they did not have the knowledge necessary to address these needs or make referrals. Staff had varying levels of comfort with discussing contraceptives or pregnancy options.

Conclusion: Shelters are missing an opportunity to address reproductive health; many women will return to their abuser or start new relationships and could be better equipped with strategies to control their fertility and avoid STIs. Options for fertility control are a key part of a woman's autonomy and overall health, yet are often being ignored.

**Previously Presented At/Published In:** APHA 2011

**Contact Information (*corresponding author*):**

Kathryn J. Luchok, PhD  
USC Arnold School of Public Health  
325 Southwood Drive  
Columbia, SC 29205  
803-727-3639  
kluchok@yahoo.com or luchok@mailbox.sc.edu

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Association between Need for and Availability of Dialysis Services

**Authors:** Amy B. Martin, DrPH; Kevin Bennett, PhD; Robert Chen

**Abstract:**

Background: End stage renal disease (ESRD) disproportionately affects poor and minority individuals; an estimated 22% of ESRD patients live in rural America. The distribution of dialysis facilities across levels of rurality, and how these facilities match need for services, has not been adequately studied. We examined supply and demand for services with special attention given to rural and minority patients.

Methods & Data Sources: This analysis utilized two national data sources; the 2009 Medicare Dialysis Compare files and the 2009 Standard Analysis File of the US Renal Data System. We estimated the number of facilities and dialysis stations per county, as well as the number of ESRD patients per county.

Results: There was an average of 30.8 patients requiring dialysis per 1,000 county residents with no urban-rural differences. Dividing counties into quartiles, according to the number of dialysis patients per 1,000 residents, we found the average number of stations increased significantly as the number of dialysis patients per 1,000 increased. Our results indicated a close association between supply and demand of services.

We also analyzed need and supply of dialysis facilities by the proportion of the county's population that was white / non-white. We divided the counties into quartiles, according to the percent of their population that was white. There were no significant differences in the proportion of patients per 1,000 county residents across quartiles. There was a significant association between the quartiles and average number of stations per county; as the proportion of a county's residents that was white increased, the average number of stations decreased.

Conclusions: Our results indicated that dialysis station availability is closely linked to ESRD patient demand, even across levels of rurality. The higher proportion of stations among non-white counties indicates a close association with demand, as these populations have higher rates of ESRD.

**Previously Presented At/Published In:** Academy Health and National Rural Health Association

**Contact Information (corresponding author):**

Amy B. Martin, DrPH  
SC Rural Health Research Center  
220 Stoneridge Dr. Ste. 204, Columbia, SC 29210  
brocka@mailbox.sc.edu  
803-251-6317

**Funding Source:** Funding provided by US Department of Health and Human Services, Office of Rural Health Policy

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** The South Carolina Witness Project: Witnessing to Save Lives

**Authors:** Rachel Mayo, PhD, Kimberly D. Comer, MPH, Vonda Evans, MPA, Deloris Williams, PhD, RN, Dolores B. Scott, MEd, Cherry Seabrook, Heather Brandt, PhD, CHES

**Abstract:**

Purpose: The Witness Project is a culturally-appropriate, evidence-based, breast and cervical cancer educational program. Through training and evaluation activities and based on feedback from community partners, the video currently used in the Witness Project was deemed outdated (originally filmed in early 1990s). The purpose was to produce an updated version of the project video featuring the stories and voices of South Carolina (SC) women about breast and cervical cancer. The updated video, The South Carolina Witness Project Video: Witnessing to Save Lives, is an important component of the program providing the backdrop for culturally-appropriate, spiritually-based messages.

Method: Permission to reproduce the video was obtained from the National Witness Project Office. An advisory team consisting of members representing the South Carolina Cancer Disparities Community Network at the University of South Carolina, Clemson University, the Best Chance Network, the American Cancer Society, the State Baptist YWA Health Ministry, and Second Chance Cancer Support Group was convened to coordinate the production of an updated video in SC. A professional video production firm, PDA, was contracted to produce the updated video. The video messages included: 1) breast and cervical cancer disparities in SC; 2) the importance of partnerships; 3) the church as a cornerstone in the Witness Project.

Results: A 14-minute video was developed. The video featured real stories of detection, treatment and survivorship from African-American women. The video has been well-received in the community and was initially screened at an event with more than 200 individuals. Copies of the video have been distributed to trained Witnesses for use during community presentations. A more formal dissemination and evaluation plan is currently being developed.

Conclusion: The updated video featuring women from SC and their stories is a culturally-appropriate communication tool and has enhanced implementation of the Witness Project in SC.

**Contact Information (*corresponding author*):**

Kimberly D. Comer, MPH  
University of South Carolina, Cancer Prevention and Control Program  
Columbia, SC 29208, Tel: 803.576.5691  
Email: [Comerkd@mailbox.sc.edu](mailto:Comerkd@mailbox.sc.edu)  
**Website:** <http://sccdcn.sph.sc.edu/>

**Funding Source:** Funding was made possible by the South Carolina Cancer Disparities Community Network (SCCDCN) supported by Grants Numbers U01CA114601-05S2 (SCCDCN-1; 2005 - 2010) and U54CA153461 (SCCDCN-II; 2015 – 2015) from the Center to Reduce Cancer Health Disparities of the National Cancer Institute. The content is solely the responsibility of the authors and does not represent the official views of the National Institutes of Health.

**Title:** Factors associated with poor glycemic control among a multi-ethnic sample of older diabetic adults

**Authors:** Favel Mondesir, Kellee White

**Abstract:**

Objective: Prior research has demonstrated persistent disparities in glycemic control by race and ethnicity. It is possible that factors contributing to these differences may vary by race/ethnicity. This study examines the association between race/ethnicity and poor glycemic control among older adults.

Methods: Data from the 2006 wave of the Health and Retirement Study (HRS), a nationally representative sample of sample of adults aged 50 and over with type 2 diabetes mellitus was analyzed (N=1,414). Glycemic control was assessed using glycoslated hemoglobin (HbA1c) and poor glycemic control was operationalized as HbA1c > 7.0%. Logistic regression models were used to estimate odds ratios (OR) and 95% confidence intervals (CI) assessing the association between race/ethnicity and poor glycemic control.

Results: Nearly 30% of diabetics in this sample exhibited poor glycemic control. Blacks (34.9%) and Hispanics (40.3%) were more likely to have poor glycemic control in comparison to whites ( $p < 0.001$ ). After adjusting for sociodemographic (age, sex, education, marital status, and nativity), health behaviors (current smoker, weight status), clinical factors (history of hypertensive, stroke, depressive symptoms), diabetes medication, and racial discrimination, only blacks (OR: 2.13; 95% CI: 1.37, 3.38) had a higher odds of poor glycemic control in comparison to whites.

Conclusion: Factors contributing to differences in poor glycemic control varied by race/ethnicity. It is important that interventions developed to address glycemic control are tailored and optimized for specific groups.

**Contact Information (*corresponding author*):**

Kellee White  
Department of Epidemiology and Biostatistics  
Arnold School of Public Health  
University of South Carolina  
800 Sumter Street, Suite 211  
Columbia, SC 29208  
kwhite@mailbox.sc.edu  
803-777-5057

**Conflict of Interest Statement:** The authors declare no conflicts of interest.



**Title:** Improving the recruitment and retention of African-American dyads for cancer disparities research: lessons learned from a community-academic-clinical team

**Authors:** Otis L. Owens, MPH , Daniela B. Friedman, MSc, PhD, Kim M. Johnson, RN, OCN , Tracey L. Thomas, MA, MS, DeLisa S. Dawkins, BHS, MT, Lucy Gansauer, RN, MSN, CHSP, Sharon Bartelt, RN, MSN, MBA, OCN, Nancy M. Waddell, Pastor Jacqueline Talley, James D. Bearden III, MD, FACP, and James R. Hébert, ScD

**Abstract:**

**BACKGROUND:** Prostate cancer (PrCA) is the most commonly diagnosed non-skin cancer among men. Both incidence and mortality from PrCA are significantly higher in African-American (AA) men compared with European-American (EA) men. In South Carolina this cancer disparity is 50% more extreme than in the country as a whole (i.e., about 80% higher in AA than EA South Carolinians). While AAs are more likely to develop and die from cancer than all other racial groups, they have low rates of participation in cancer research, particularly in clinical trials. A collaborative approach to developing and conducting PrCA research and education through community-academic-clinical partnerships has been strongly recommended.

**OBJECTIVE:** To describe the comprehensive recruitment/marketing efforts of Community-Academic-Clinical partners for a pilot PrCA education project with AA men and women (spouses/ family members) in the South that was designed to address the discordance between high rates of PrCA mortality and limited participation in cancer education and research.

**METHODS:** Guided by Vesey's framework on recruitment and retention of minority groups in research, recruitment and marketing strategies were selected and implemented following multiple brainstorming sessions with partners with established community relationships.

**RESULTS:** Interpersonal and media-based recruitment was conducted over two months to recruit 81 participants. This included: education/promotion at health fairs, churches, community meetings, and medical/oncology-related appointments; radio promotion on stations with a large number of AA listeners; messages on AA community organization and healthcare system websites/listservs; flyer distribution; word of mouth.

**CONCLUSIONS:** Multiple, culturally-appropriate strategies are recommended for the recruitment and retention of AA men and women for PrCA education. These strategies include: (1) being flexible with scheduling and implementation of research, (2) promoting a concluding celebration attended by several community, legislature, and hospital spokespeople, and (3) creating a formalized advisory council to assist with planning/implementation of educational programs and community engagement in research.

**Contact Information (corresponding author):**

Otis L. Owens, MPH  
Health Promotion, Education and Behavior  
Arnold School of Public Health, 800 Sumter Street, RM 221F  
[owenso@email.sc.edu](mailto:owenso@email.sc.edu); 803-777-6761

**Funding Source:** Funded by the National Cancer Institute (NCI) Community Networks Program Centers U54 CA153461-01 (PI: Hébert; Project Leader: Friedman). Partially supported by an Established Investigator Award in Cancer Prevention and Control from the Cancer Training Branch of the NCI to J.R. Hébert (K05 CA136975).

**Acknowledgments:** We acknowledge the community advisory panel, Spartanburg Regional Gibbs Cancer Center, Community Clinical Oncology Program and NCI Community Cancer Center Program partners, Dawn Skaggs, Bruce Grant, RN, and study participants.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** The South Carolina Collaborative Approach to the Health Information Technology Regional Extension Center: A Mechanism to Permit Health Equity

**Authors:** Grishma Patel, MPH, Amy Brock Martin, DrPH, J. Todd Thornburg, PhD, Nora Dunnigan, Graham Adams, PhD, Deryl Metze, Emma Forkner, Peter Leventis, Lynn Hudson, RHIA, Jennifer Anderson, MHSA, PMP

**Abstract:**

Background. The HITECH Act of the American Recovery and Reinvestment Act of 2009 (ARRA) established 62 Regional Extension Centers (REC) throughout the nation to assist primary care physicians practicing in settings that serve uninsured, underinsured, and medically underserved populations, implement electronic health records (EHRs) to allow health care to become more evidence-based, efficient, and effective.

Purpose. The objective of this case study is to exemplify the collaborative approach taken by SC and its implications on vulnerable populations.

Methodology. In-person and telephone interviews were performed with 8 individuals that were crucial to the foundation of Center for Information Technology Implementation Assistance in South Carolina (CITIA-SC). Process evaluations were also examined.

Theoretical Model. Gray & Wood's (1991) definition of collaboration combined with the strategic management/social ecology theory and institutional/negotiated order theory were used to examine the collaborative approach.

Findings. Through this collaboration, the SC Office of Rural Health (SCORH) and Primary Health Care Association (SCPHCA) expanded their capabilities and will be able to sustain their services to ensure that their constituents, Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs), will continue to receive technical assistance in EHR implementation. The availability of these services will ensure that RHCs and FQHCs, which serve vulnerable populations, have EHRs available to promote the improvement of healthcare quality, health outcomes and health equity. Though all partners faced challenges, which included differing levels of expertise and financing, funding necessities, and issues of regulation clarity, the SCORH experienced them disproportionately more than other partners. The SCPHCA also had to overcome these challenges, but previous experience with EHRs allowed them to seamlessly expand their services.

Conclusion. Though the future of CITIA-SC remains unknown, SCORH and SCPHCA will continue to provide technical assistance for EHR implementation to its constituents to promote equity in healthcare.

**Contact Information (corresponding author):**

Grishma Patel, Research Associate  
SC Rural Health Research Center  
Arnold School of Public Health, Health Services Policy and Management  
220 Stoneridge Drive, Suite 204, Columbia, SC 29210  
803-251-6317  
gpatel.usc@gmail.com

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Working with Communities to Generate Community-level and Community-engaged Interventions to Reduce Health Disparities

**Authors:** Stacy Smallwood, MPH, Darcy A. Freedman, PhD, Ronald Pitner, PhD, Patricia Sharpe, PhD, MPH, Jennie Anne Cole, MSW, Kiesha Webb, Jessica Hunter

**Abstract:**

Health disparities research is increasingly influenced by 2 research paradigms: community-based participatory research (CBPR) and social determinants of health (SDOH). CBPR approaches call for collaborative research relationships that empower communities to co-generate research programs while SDOH perspectives focus on macro-level or “upstream” factors influencing individual health outcomes. This research incorporates a CBPR approach to address SDOH among residents living in a public housing community and an adjacent neighborhood in Columbia, SC. A mini grant program was developed to encourage community members to develop community-level and community-engaged interventions focused on creating a healthier community environment through neighborhood improvement; mini grants were only available to people who lived or worked in one of the targeted communities. A 6-session training program was developed to guide community members in proposal development with 25 people attending at least 1 session. Six proposals were submitted for external peer-review. These proposals were scored according to the degree to which the proposed interventions benefited everyone in the community and engaged community members in the change process in a manner that was feasible within a 6-month timeframe. Submitted proposals focused on hunger and food security (n=2), exercise and wellness (1), computer literacy (2), and community advocacy and capacity-building (n=2). Three proposals were organized by community residents and 3 by faith-based organizations in the community. The awarded programs focused on hunger and food security, exercise and wellness, and community advocacy. The proposals selected for funding received up to \$12,000 each to enact their interventions over a 6-month timeframe. In addition to the awarded programs, a community garden is being implemented in the targeted community. The four community-level, community-engaged interventions will be evaluated collectively using a quasi-experimental design to assess their ability to increase community participation among public housing residents.

**Previously Presented At/Published In:**

**Contact Information (*corresponding author*):**

Stacy W. Smallwood, MPH  
Director, Community Empowerment Center  
1505 Garden Plaza, Apt. AD1  
Columbia, SC 29204  
E-mail: smallwoods@sc.edu

**Funding Source:** This research was supported by the Kresge Foundation (Darcy A. Freedman, Co-PI and Ronald Pitner, Co-PI).

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Written and Spoken Narratives about Health and Cancer Decision Making among African Americans: A Community Photovoice Project

**Authors:** Tracey L. Thomas, MA MS, Otis L. Owens, MPH, Daniela B. Friedman, PhD, Myriam E. Torres, PhD, & James R. Hebert, ScD

**Abstract:**

**Background:** Photovoice is a community-based participatory research method that researchers have used to identify and address community health needs. We developed a photovoice project to serve as a supplement to a National Cancer Institute (NCI)-funded pilot study focusing on prostate cancer decision making with an African-American community in South Carolina. We used photovoice for two purposes: (1) to enhance communication between study participants and researchers, and (2) to empower the community involved in a family-centered prostate cancer study to take an active interest in their health.

**Methods:** The 15 individuals (7 men and 8 women) participating in the photovoice project were asked to photograph aspects of their community that informed their health decisions. Participants provided written and audio-recorded spoken narratives to describe a small sample of photographs. A mixed methods approach was used to analyze photograph and narrative content.

**Results:** Four primary themes emerged: 1) food choices; 2) physical activity practices; 3) access to health care; and 4) influences of spirituality on health. Although written and audio-recorded narratives were similar in content, the audio-recorded responses were far more descriptive. Participants' audio-recorded narratives averaged 39 words, whereas written narratives averaged nine words. By providing an increased level of detail and personalization, audio-recorded narratives greatly enhanced the project's concluding community photovoice presentation.

**Research implications:** Photovoice strengthened the NCI pilot study by enhancing the communication between researchers and participants and providing participants with an opportunity to reflect on their health and cancer-related decision making. Collecting audio-recorded narratives was key in gaining greater clarity regarding participants' health perspectives and decision-making behaviors, as participants provided richer content through the spoken rather than written word.

Results suggest that incorporating audio-recorded narratives in community photovoice presentations may increase the impact photovoice projects have on decision makers by providing a more detailed look into participants' lives.

**Contact Information (corresponding author):**

Tracey L. Thomas, MA, MS, Doctoral Candidate  
Arnold School of Public Health, Department of Health Promotion, Education, and Behavior  
thoma427@email.sc.edu; (859) 302-4089

**Acknowledgments:** Participants and project partners at Spartanburg Regional Gibbs Cancer Center.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** Results from a colonoscopy based screening program for the uninsured: a pilot study from South Carolina

**Authors:** K Wallace, W Gilchrist, D Wortham, M Stinson, A Davis, F Berger, K Williamson, M Seabrook

**Abstract:**

Purpose: The purpose of our study was to screen through colonoscopy a racially diverse, uninsured population in rural South Carolina (SC).

Methods: 150 patients aged 42 to 64 years were recruited from four free medical clinics and one federally qualified health center. Patients underwent a screening colonoscopy by a board certified gastroenterologist, at no charge to the patient. Prior to the colonoscopy, participants completed a questionnaire addressing demographics, medical and family history. To assess the association between colorectal lesions and personal risk factors, we estimated risk ratios and 95% confidence intervals for one or more adenomas using generalized linear regression analyses using a logarithmic linkage and a Poisson distribution adjusted for age and gender.

Results: The average age of subjects was 55.2 years (SD 4.9), 30% were male, and 54% were African American (AA). 70% of our participants were unemployed 98.5% were uninsured. 13% of patients reported a family history of colorectal polyps and 25% reported a family history of colorectal cancer. Overall, we observed that 36.5% of patients had at least one adenoma while 14% had at least one hyperplastic polyp. We found that women had a non-significantly lower risk of adenomas compared to men. AAs compared to Caucasians were more likely to have a greater number of adenomas (RR 1.23 (95% CI 0.79-1.93)), and more advanced histology neoplasms (RR 3.21 (0.92-11.19)) and were less likely to have hyperplastic polyps (RR 0.32 (95% CI 0.13-0.78)). We observed that a family history of colorectal polyps (RR 1.84 (95% CI 1.05-3.20)) or colorectal cancer (RR 1.53 (95% CI 0.95-2.47)) was associated with an increased risk of adenomas compared to those reporting no family history of colorectal neoplasia.

Conclusions reached: We found that AAs and those with a family history of polyps or cancer are at increased risk of colorectal neoplasia. Our results point to the importance of the index colonoscopy and availability of follow-up surveillance exams to reduce the incidence of colorectal cancer in South Carolina and beyond.

**Previously Presented At/Published In:** American College of Gastroenterology Annual Meeting

**Contact Information (corresponding author):**

Marylou Stinson  
Center for Colon Cancer Research at USC/Gibbs Cancer Center  
803.351.5197  
email: mstinson@scgastroassn.com  
**Website:** <http://etl2.library.musc.edu/scccpcn/index.html>

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** HIV-testing among financially disadvantaged women diagnosed with Cervical Cancer in South Carolina

**Authors:** Lisa T. Wigfall, Heather M. Brandt, Sharon M. Bond, Heather Kirby, Sandra H. Glover, James R. Hébert, Wayne A. Duffus

**Abstract:**

The purpose was to describe HIV testing conducted among women diagnosed with cervical cancer (CxCa). CxCa is an HIV/AIDS-associated cancer and more common among HIV-positive women because of sexually transmitted human papillomavirus (HPV) infection and immunocompromised status. This was an observational study of South Carolina women identified from linking Medicaid claims and Breast and Cervical Cancer Program (BCCP) databases. The International Classification of Diseases for Oncology, 3rd Edition (ICD-O-3) CxCa diagnosis code (C530-C539) was used to identify 282 women diagnosed with CxCa. Participants were enrolled in Medicaid for at least one month in the first year of being enrolled in the BCCP and >9 months in each subsequent year between January 1, 2005-December 31, 2009. Current Procedural Terminology (CPT) codes for a rapid (86701-92, 86702-92, 86703-92) or blood (86689, 87390, 87534, 87535, 87536) HIV test was used to determine if an HIV test had been ordered since CxCa diagnosis. The sample was 54.6% white (Median age = 49 years) and 39.4% black (Median age = 52 years). Those less than aged 40 were excluded (24.8%; n=70) due to lower CxCa incidence. Only 7.5% (n=16) of the remaining 212 women had been tested for HIV since being diagnosed with CxCa. Routine HIV testing is recommended for persons aged 13-64 if HIV status is unknown. Knowledge of the HIV status of women diagnosed with CxCa is important to afford prompt linkage to specialty care that will improve cancer and overall health outcomes.

**Contact Information (*corresponding author*):**

Lisa T. Wigfall, PhD  
University of South Carolina  
Institute for Health Disparities  
220 Stoneridge Drive, Suite 103  
Columbia, SC 29210  
Phone: 803.251-2298  
Email: lisa.wigfall@sc.edu

**Funding Source:** This publication was supported by the South Carolina Clinical & Translational Research Institute in the academic home of Medical University of South Carolina 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.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

**Title:** A gender-based examination of colorectal cancer screening participation among participants in a colon cancer awareness and educational program in two South Carolina counties

**Authors:** Lauren M. Workman, Heather M. Brandt, Dawnyéa D. Jackson, Lucy Annang, Annette Cook, Tina Marie Devlin, Suzanne Swan, Swann Arp Adams, Michael Wirth, Tom Hurley

**Abstract:**

Colorectal cancer (CRC) is one of the most common and deadly types of cancer in the United States. Women are generally more likely to engage in preventive health behaviors; participation in CRC screening is low for both women and men. The purpose of this study was to examine participation in CRC screening by gender after exposure to a CRC educational program. The program was conducted in South Carolina and was designed to increase awareness of and participation in CRC screening. Post-test only data were collected immediately after program exposure. Descriptive and comparative analyses were conducted. Our sample (n=1,436) was 68% female; aged 45 and older (62%); African American (58%), greater than a high school education (68%), and had health insurance (94%). When compared to men, significantly more women reported intentions to engage in CRC screening steps, including intentions to learn more about colon cancer (89%; 94%, respectively;  $p<0.05$ ). The percentage of women screened for CRC was lower than for men (57%; 59%, respectively), but there were no statistically significant differences. The only type of CRC screening examined for which women had a higher percentage of participation was for fecal occult blood test (FOBT). For all other types of CRC screening, men reported higher levels of participation. Women and men reported participating in CRC screening at similar rates, yet women displayed higher action-oriented intentions. Levels of participation in CRC screening lag far behind screening for other types of cancer. Health promotion interventions are needed to address barriers and increase participation.

**Contact Information (corresponding author):**

Heather M. Brandt, PhD, CHES  
University of South Carolina-Arnold School of Public Health  
Department of Health Promotion, Education, and Behavior and Cancer Prevention and Control Program  
915 Greene Street  
Columbia SC 29208  
Tel: 803.576.5649  
Email: hbrandt@sc.edu  
**Website:** <http://cccr.sc.edu/>

**Funding Source:** This research was supported by a grant from The Duke Endowment (6174-SP; PI: Brandt).

**Conflict of Interest Statement:** The authors declare no conflicts of interest.



**Poster Session Planners:**

**Jametta S. Magwood, MPH**  
Doctoral Student

University of South Carolina  
Arnold School of Public Health  
Health Service Policy and Management  
Institute for Partnerships to Eliminate Health  
Disparities  
220 Stoneridge Drive, Suite 103  
Columbia, SC 29210  
magwoodj@mailbox.sc.edu

**Charles S. Beverley Jr., PhD(c), MS**  
Doctoral Candidate

University of South Carolina  
Arnold School of Public Health  
Health Service, Policy and Management  
Institute for Partnerships to Eliminate  
Health Disparities  
220 Stoneridge Drive, Suite 103  
Columbia, SC 29210  
beverley@email.sc.edu

**Poster Session Consultants:**

**Daheia Barr-Anderson, PhD, MSPH**  
Assistant Professor

University of South Carolina  
Epidemiology & Biostatistics  
Arnold School of Public Health  
Public Health Research Center, Suite 135  
921 Assembly Street  
Columbia, South Carolina 29208  
dbarrand@mailbox.sc.edu

**Minnjuan Flournoy- Floyd, PhD, MPH**  
Post-Doctoral Fellow

University of South Carolina  
Arnold School of Public Health  
Institute for Partnerships to Eliminate Health  
Disparities  
220 Stoneridge Drive, Ste 103  
Columbia, SC 29210  
minnjuan@sc.edu

**Kellee White, PhD**  
Assistant Professor

University of South Carolina  
Epidemiology and Biostatistics  
Epidemiology & Biostatistics  
Arnold School of Public Health  
800 Sumter Street, Suite 211  
Columbia, SC 29208  
kwhite@mailbox.sc.edu

### ***About the Institute for Partnerships to Eliminate Health Disparities***

The mission of the Institute is to eliminate health disparities and promote health equity, using a meta-leadership framework that increases academic, community and other strategic partnerships in South Carolina and beyond.

The Institute was created to allow the University of South Carolina to enhance its public and private partnerships. These partnerships provide the opportunity for the pursuit of interinstitutional, multi-disciplinary research, education, and training to address health disparities.

To learn more about IPEHD faculty and staff, current programs, and resources, visit [http://www.sph.sc.edu/health\\_disparities/](http://www.sph.sc.edu/health_disparities/).

### ***Acknowledgments***

Funding for this conference was made possible (in part) by P20MD001770 from the National Institute on Minority Health and Health Disparities. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention by trade names, commercial practices, or organizations imply endorsement by the U.S. Government.