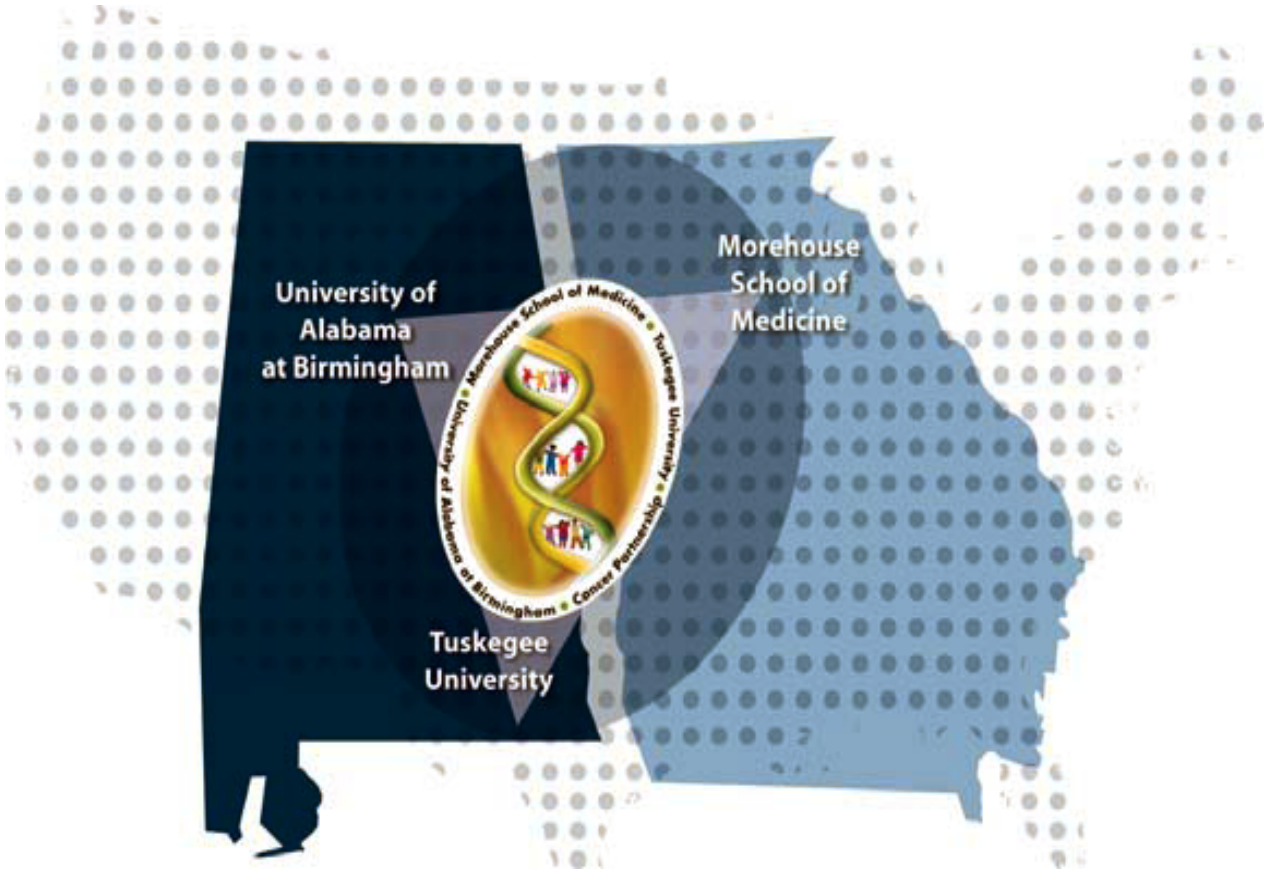
Utilization of a CBPR Framework for Community Outreach Research



PACHE Meeting 2016

- The established U54 Partnership is comprised of Morehouse School of Medicine (MSM), Tuskegee University (TU), and the NCI-Designated UAB Comprehensive Cancer Center (UABCCC).

- The Partnership, located in the heart of the Southeast, a region with a large, historically underserved, African American population, has the overall goal of…
  - attaining excellence in research focused on elimination of cancer health disparities and,
  - reducing the cancer burden among underserved populations in the region.

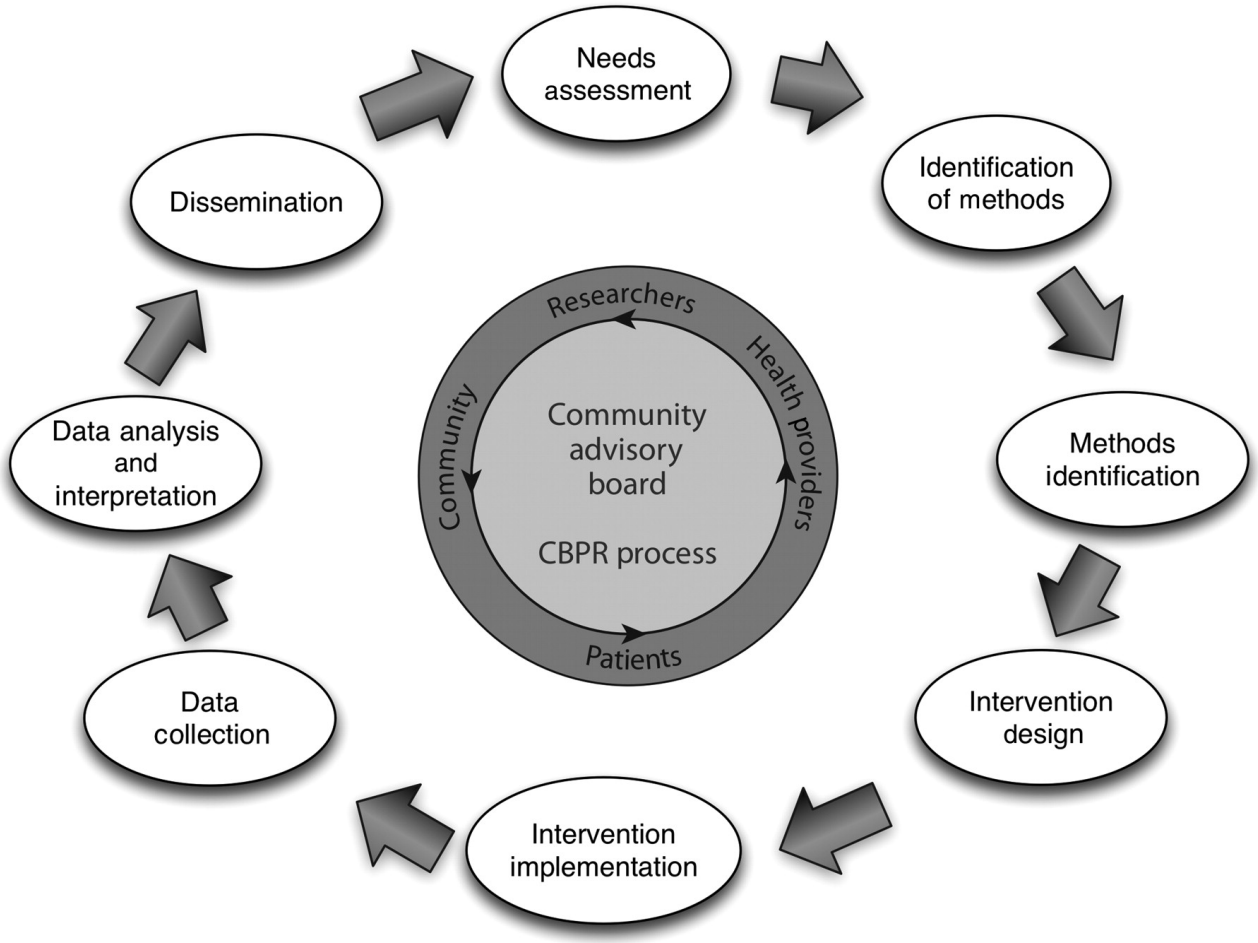
Socio-Ecological Model

What is community-based participatory research (CBPR)?

- "a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings"

W.K. Kellogg Foundation (2001)

Community Based Participatory Framework



Community Health Advisors (CHAs) Model

- CHAs:
  - From, or have an unusually close understanding of, the community served;
  - Trained to provide culturally appropriate health education and information, offer social support and informal counseling;
  - Considered informed and trusted community members;
  - Uniquely positioned to advocate on behalf of individuals and communities and help build capacity.

Cancer Outreach

Co-Leaders

UAB

Mona Fouad, MD

MSM

Brian Rivers, PhD, MPH

TU

Vivian L. Carter, PhD, MHR

UNIVERSITY OF ALABAMA AT BIRMINGHAM

Patient Navigation Program

Program Goals & Objectives

Goal

- **To assess the efficacy of a Patient Navigator (PN) model to enhance the participation of African American (AA) cancer patients in state-of-the-art cancer therapeutic clinical trials at the UAB Comprehensive Cancer Center.**

Specific Aims

- **Train Community Health Advisors (CHAs) as PNs to assist low-income, underserved cancer patients, primarily AAs, to overcome barriers to participation in therapeutic cancer clinical trials.**
- **Increase the recruitment of AAs in cancer clinical trials through PN services at the UAB CCC clinics from 22% to 30% of all patients enrolled and maintain a retention rate of at least 96%.**
- **Develop and implement a culturally appropriate educational program to create awareness of clinical trials in the targeted communities.**

Methods

- **Lay individuals were hired and trained to serve as PNs for clinical trials.**
- **AA patients potentially eligible for clinical trials were identified through chart review or referrals by clinic nurses, physicians, and social workers.**
- **PNs provided two levels of services:**
  - **education about clinical trials**
  - **tailored support for patients who enrolled in clinical trials.**

Results

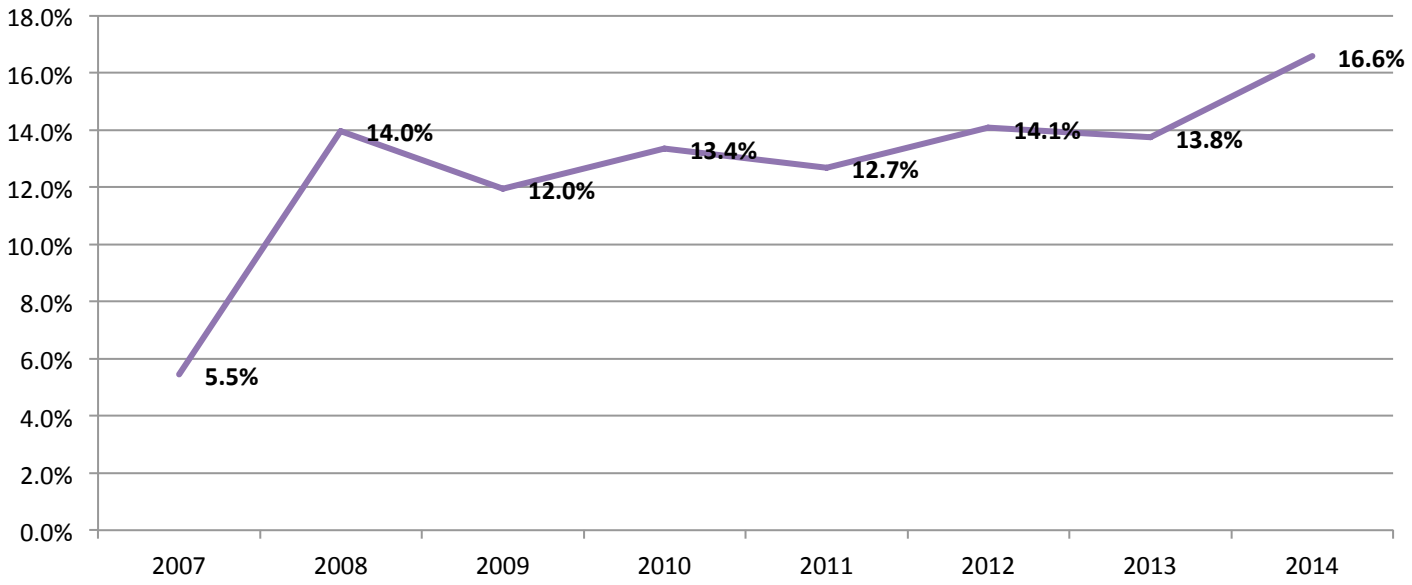
- **Between 2007 and 2014, 424 AA cancer patients were referred to IMPaCT.**
- **Of those eligible for a clinical trial (N=378), 304 (80.4%) enrolled in a trial and 272 (72%) consented to receive PN support.**
- **Of those receiving PN support, 74.5% completed the trial, compared to 37.5% of those not receiving PN support.**
- **The difference in retention rates between the two groups was statistically significant ($p < 0.001$).**
- **Participation of AAs in therapeutic cancer clinical trials increased from 9% to 16%.**

Conclusions

- **PNs for clinical trials successfully retained AAs in therapeutic trials compared to non-PN trial participation.**
- **The model holds promise as a strategy to reduce disparities in cancer clinical trial participation.**
- **Future studies should evaluate it with racial/ethnic minorities across cancer centers.**

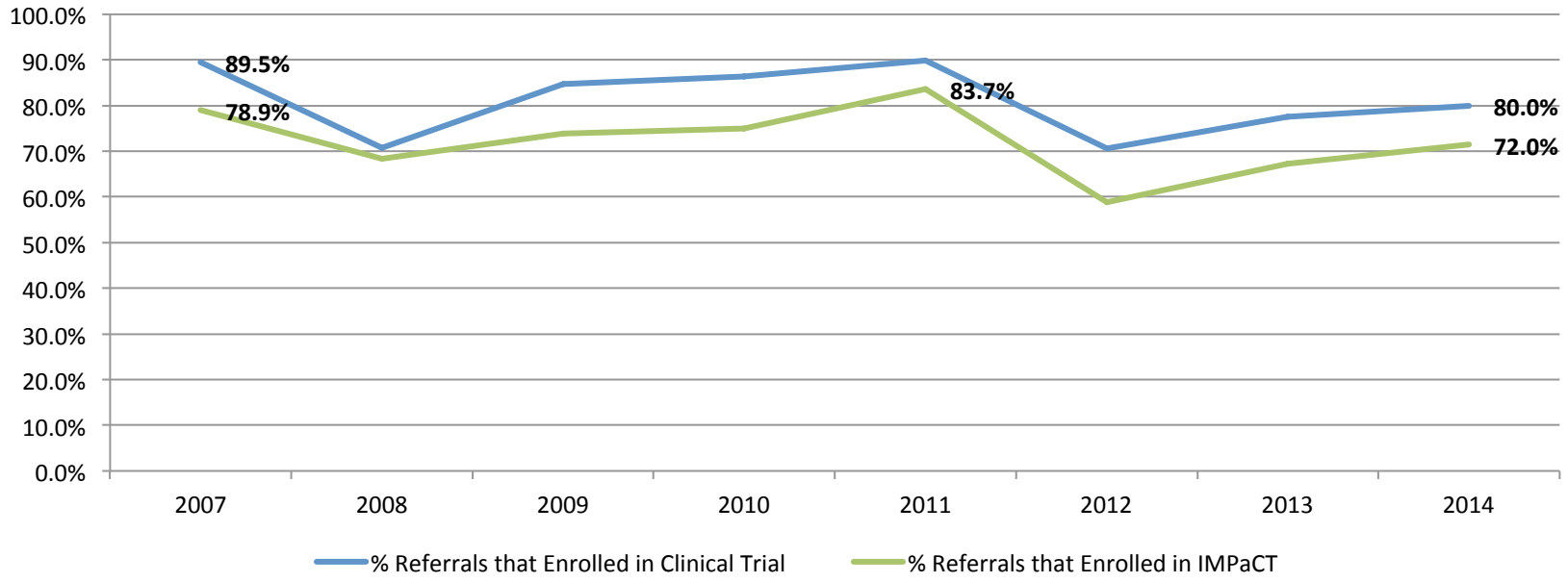
Program Accomplishments

Referral rate of African American cancer patients to IMPaCT has increased since 2007



Program Accomplishments

Clinical Trial and IMPaCT Enrollment Rates by Year (% of Referred Eligible AA Patients)



Accomplishments

Services provided by the navigators to cancer patients on a clinical trial

Type of Assistance	Number Provided	Services Provided
Lodging	72	Special hotel rates for patients; donated meals and groceries
Social Support	5,152	PNs make appointment reminder calls, meet patients at clinic appointments, assist in patient and clinic staff discussions, assist in completion of forms and navigating the healthcare system, send cards of support, and provide referrals to other agencies
Transportation	972	Parking vouchers, gas cards, taxi/bus rides to clinic appointments

Highlights of Past Year

- IMPaCT manuscript, "Patient Navigation as a Model to Increase Participation of African Americans in Cancer Clinical Trials," Journal of Oncology Practice (In Press).
- Clinical Trial Education
  - More than 2,000 AA cancer patients at UAB have received clinical trial education by the PNs.
- PNs have raised over $35,000 in funds to pay for many of the resources provided to their patients.

MOREHOUSE SCHOOL OF MEDICINE

Down Home Healthy Living

Program Goals & Objectives

- **The goal of the MSM Outreach Program is to collaborate with the African American community as equal partners in the research process, including the development of culturally appropriate, salient health information and outreach strategies to increase participation in collaborative research and program development.**

Specific Aims

1) Implement Down Home Healthy Living (DHHL) educational intervention to reduce cancer risk and lifestyle modification among African American women in four metro-Atlanta counties (Clayton, Cobb, DeKalb, and Fulton).

2) Assess the impact of DHHL on cancer screening behavior, dietary intake, and physical activity.

3) Train, implement, and evaluate the CHA model.

Background

- **The Down Home Healthy Living (DHHL) Cookbook with Lifestyle tips was first published in 2002 by the National Black Leadership Initiative on Cancer (NBLIC).**

- **The NBLIC was established in response to an emerging body of literature pointing out that African American mortality rates for every major type of cancer exceeded those for other racial and ethnic groups. DHHL consists of three modules:**
  - ***Session 1* – Get Smart (CRC screening);**
  - ***Session 2* – Get With It (dietary intake);**
  - ***Session 3* – Get Down (physical activity).**

- **CHAs work with selected churches and their health ministries to implement the DHHL initiative.**

Background

- DHHL is a church-based education program of the National Cancer Institute and Morehouse School of Medicine.
- The MSM Outreach Program has implemented DHHL in four African American churches located in four metro-Atlanta counties (Clayton, Cobb, DeKalb, and Fulton).
- Using the train-the-trainer model, 8 facilitators were trained/ certified to implement DHHL in four churches.
- DHHL emphasizes the importance of cancer prevention and early detection through health lifestyle changes in the areas of nutrition, physical activity, and colorectal cancer.
- DHHL increases participants' nutrition-cancer risk knowledge; food and health attitudes; physical activity knowledge, attitudes, and beliefs; and knowledge of cancer risks and symptoms.

Accomplishments

Items	p-value (Baseline and Post Intervention)
What is Colorectal Cancer (CRC)?	<0.0001
Detecting and removing polyps may be a way of preventing CRC?	<0.0001
How many servings of vegetables would you say a person your age and sex should eat each day for good health?	0.008
How many servings of meat, poultry, fish, dry beans and eggs, would you say a person your age and sex should eat each day for good health?	0.011
Eating more fruits and vegetables decreases a woman's risk of developing breast cancer?	<0.001

Accomplishments

Items	p-value (Baseline and Post Intervention)
There is nothing I can do to prevent cancer.	0.018
Yellow-orange vegetables, such as carrots, squash, sweet potatoes and dark green vegetables are the best sources of carotenoids.	0.032
Eating more fruits and vegetables decreases a woman's risk of developing breast cancer.	<0.001
Examples of physical activities that reduce cancer risk include (check all that apply).	<0.000
If I participate in regular exercise or sports, then I will increase my hear and lung fitness.	0.040

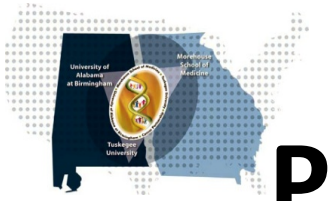
Highlights of Past Year

PUBLICATIONS:

- **Co-author-Dr. Ernest Alema-Mensah. Factors associated with body mass index among African American breast cancer survivors. J Ga Public Health Assoc. 2016; 5(3).**
- **Co-author-Dr. Ernest Alema-Mensah. An examination of perception in integrated care practice. Community Ment Health J. 2015; doi 10.1007/s10597-015-9837-9.**
- **Co-author-Dr. Ernest Alema-Mensah. Lifestyle modification experiences of African American breast cancer survivors: a needs assessment. JMIR Cancer. 2015; 1(2).**

TUSKEGEE UNIVERSITY

Community Research Capacity Building Program and Healthy Lifestyle



Program Goals & Objectives

Goals:

The goals of the Tuskegee University Cancer Outreach Program are:

1) assess the translational capacity of knowledge derived from the interdisciplinary research proposed by the U54 pilot projects.

2) design translational programs that bring the research process full circle by moving from the clinical specificity of natural science to practical community application.

3) establish a community-based participatory translational research program utilizing the Partnership faculty, postdoctoral and graduate student scholars, the Bioethics Shared Resource, and community members to enhance the impact of the Partnership on health disparities utilizing the community-based participatory research model.

Objectives:

The objectives of Tuskegee University Cancer Outreach Program are to:

1) establish a cancer community research advisory committee comprised of community members trained by the Partnership Bioethics Shared Resource.

2) establish a community cancer education lecture and discussion series.

3) establish a Partnership cancer exchange program.

4) convene a community health advisors cancer information dissemination conference.

Specific Aims

The specific aims of the TU Cancer Outreach Program are to:

- **1) establish translational relationship between the Partnership and the community.**
- **2) produce effective strategies and programs to facilitate increased knowledge and awareness of cancer and prevention measures to impact minority and underserved communities.**
- **3) integrate effective strategies and programs into a broader knowledge aggregate that allows for important advancements in cancer research and healthcare.**

Healthy Lifestyle Marathon

- HL is a culturally relevant, community-based program designed to promote a healthier lifestyle (increased physical activity and better nutritional choices) in Bullock and Macon Counties and, thereby, reduce the risk of cancer.
- HL implemented behavior modification strategies for nutrition and physical activity and engaged the community on multiple levels in order to sustain activities and impact beyond the scope of the U54 Partnership.

Highlights of Past Year

- **Established the Macon and Bullock County Community Research Review Board (6 members)**
- **CHAs created a video from the Healthy Lifestyle Marathon sent to *Let's Move* sponsored by First Lady Michelle Obama and placed on the HDIRE webpage.**
- **Cancer Outreach CHA presentation at the HBCU and HSI Research Conference at Winston Salem State University on September 10-13, 2012.**

National Wellness Awareness and Prevention

"Turn Up 4 Health"

8th Annual

Healthy Lifestyle HEALTH Marathon

Cyclists | Runners | Walkers

Prizes awarded for 1st, 2nd and 3rd place

Saturday, April 25, 2015

8:00 a.m. CST

Downtown Tuskegee Square

Tuskegee, Alabama

For more information, visit:
www.tuskegee.edu/hdire

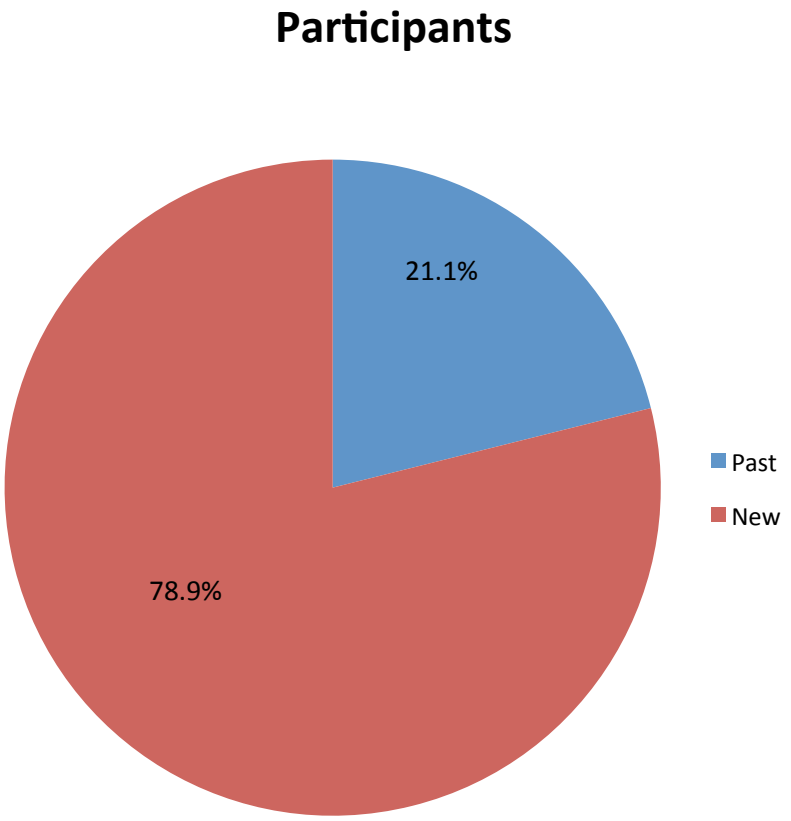
LETS MOVE!

Tuskegee University Health Disparities Institute for Research and Education (HDIRE), Morehouse School of Medicine/Tuskegee University/University of Alabama at Birmingham Comprehensive Cancer Center Partnership at Tuskegee University, Community Outreach, Healthy Lifestyle Program Bullock and Macon Counties and Network Members

MARATHON MOMENTS IN TIME

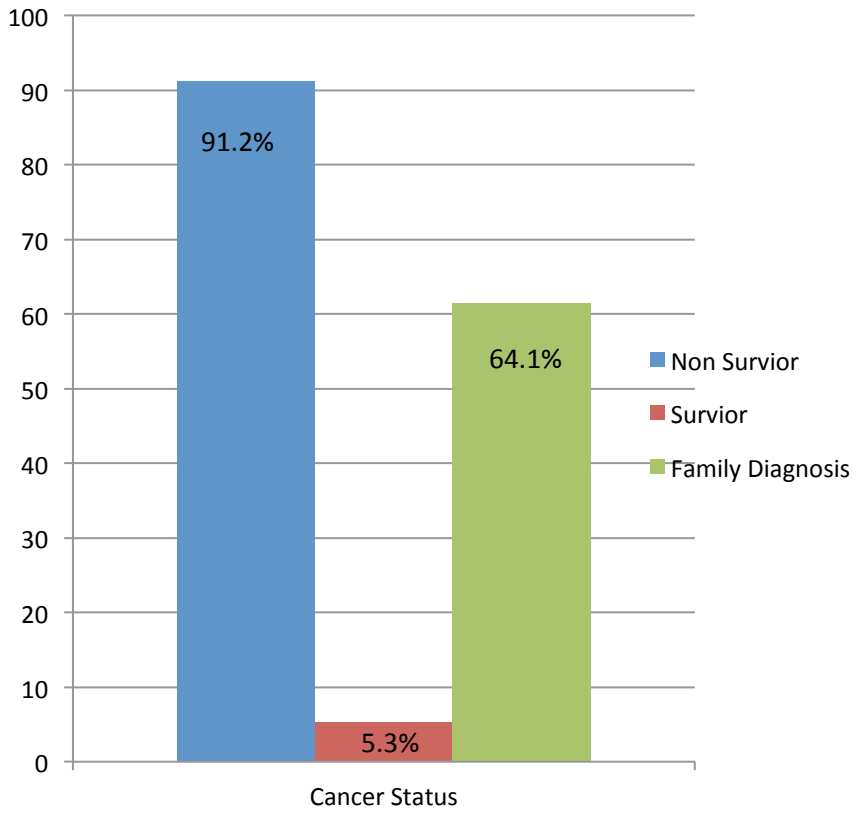
Healthy Lifestyle Marathon

Health Marathon Survey Summary 2015	
Variables	**Results**
Number of Participants	**150**
New Attendees	**78.9%**
Race	**86% African American** **10% Caucasian** **3% Other**
Insurance Coverage	**15% No Coverage** **85% Insurance Coverage** **-65% Private** **-7% Medicare** **-7%Medicaid** **-21% Missing**

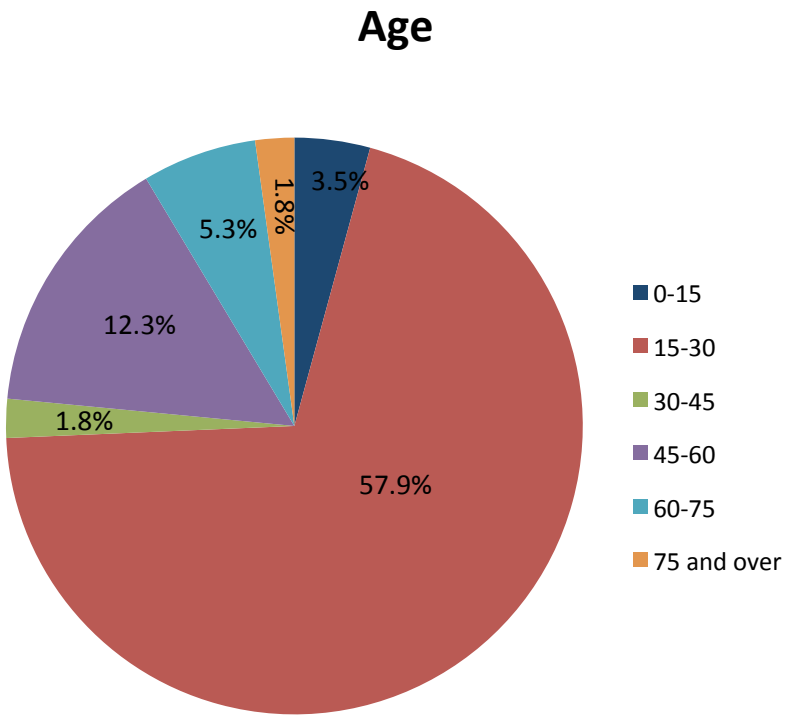


Healthy Lifestyle Marathon

Survivor Status



Age Range



Healthy Lifestyle Program

Weight and blood pressure measures of participants engaged in a cancer risk awareness and prevention program in Bullock and Macon Counties, Alabama.

Variables	Weight [a]					Blood Pressure [a]						
	Baseline	Final	% change	p-Value	Systolic b[b]	Systolic f[c]	% Change	p-Value	Diastolic b[b]	Diastolic f[c]	% Change	p-Value
Macon County (N=38)												
Curves (N=9)	216.90 (53.5)	206.60 (45.6)	-4.6	0.02*	148.0(15.2)	131.8 (11.6)	-10.95	0.006**	85.3 (8.2)	77.4 (8.6)	-9.17	0.004**
Floor Exercise (N=10)	200.78 (46.3)	178.33 (41.6)	-11.18	.0001**	141.8 (15.0)	124.7 (17.8)	-12.06	0.008**	89.6 (10.8)	78.2 (6.9)	-12.66	0.0002***
Walking (N=10)	183.78 (34.6)	181.78 (35.4)	-1.09	0.65	138.7 (10.9)	126.8 (16.4)	-8.54	0.062	87.9 (8.1)	81.2 (4.0)	-7.53	0.029*
Water Aerobics (N=9)	180.5 (18.6)	179.00 (16.5)	-0.86	0.73	150.4 (34.2)	133.4(28.2)	-11.30	0.009**	85.1 (9.6)	80.5 (11.1)	-5.34	0.109
Bullock County (N=24)												
Aerobics (N=6)	235.5 (32.3)	233.9 (34.9)	-0.69	0.45	134.8 (24.0)	124.3 (10.1)	-7.79	0.12	134.8 (24.0)	124.3 (10.1)	-6.93	0.18
Dance (N=6)	212.0 (84.07)	215.0 (84.4)	+1.42	0.40	120.0 (12.2)	118.0 (10.6)	-4.83	0.57	120.0 (12.2)	118.0 (10.6)	-2.62	0.76
Gym (N=6)	178.0 (21.8)	174.80 (18.7)	-1.80	0.27	130.0 (12.2)	120.2 (12.3)	-7.69	0.82	130.0 (12.2)	120.2 (12.3)	-8.04	0.22
Walking (N=6)	180.1 (27.5)	174 (26.6)	-3.40	0.009**	126.5 (10.5)	121.3 (9.91)	-4.15	0.42	126.5 (10.5)	121.3 (9.91)	+0.97	0.85

*P <0.05
**p<0.01
a Mean and SD of weight and blood pressure measurements at baseline and at the end of the intervention
b Systolic and diastolic pressure collected at baseline
c Systolic and diastolic blood pressure collected at the end of the intervention

- **Healthy Lifestyle:**
  - **Individuals reached through Healthy Lifestyles Marathon (N=3000 over 8 years)**
  - **Results of Healthy Lifestyle Program follow-up:**
    - **<u>Results of Health Knowledge Survey</u> :35% of participants in HL have started programs to continue the healthy lifestyle:**
      - ***<u>7 programs</u>***
        - **Macon County: 1)Mt. Olive Baptist Church, 2) Macon County Line Dancers, 3) Greater St. Mark, 4) Greenwood Missionary Baptist Church.**
        - **Bullock: 1) Mt. Silla Health, 2)Extension Health Program, 3) Sistah's walking group.**

Accomplishments

- Community Organization Grants: 2 funded studies and 1 MOU with Medicare and Medicaid Services
- Believe – Hypertension and Breast Cancer Awareness Project. Funder the HBCU Research Network (May 12, 2013). Note: Dr. Troy and Dr. Carter are the Cancer Outreach mentors. 5,000
- Parish Nurses - Community Garden, Deep South Network
- Sistahs Can Survive - MOU with Medicare and Medicaid Services

Accomplishments

PUBLICATIONS (8)

- **Dawkins NL, Carter VL, Findlay HJ and Howard B. 2016. Responses to health knowledge and behavior questionnaire: implications for nutrition intervention. *SM Journal of Food & Nutritional Disorders.* 2: 1012-1016.**
- **Carter VL, Dawkins NL, Howard B, 2015. Weight and blood pressure reduction among participants engaged in a cancer awareness and prevention program. *Preventive Medicine Report* 2: 858-861.**
- **Dawkins NL, Stayton MA, Pace RD, and Gilbreath E. 2014. Nutrition/Diet and Cancer, Portulaca oleracea chemopreventive effects in rats injected with 1,2- dimethylhydrazine. FASEB J April, 28:824.3**
- **Cunningham J, Carter V, Troy R, and Davis C. 2012. A Survey of Risk Behaviors associated with the Human Papillomavirus among African-American Female College Students in Alabama. *ASAPHERD Journal*, Sum 2012, vol 32, number 4.**
- **Carter VL, Sodeke SO, Mwase I, and Turner T. Health Decisions in the Face of Uncertainty. *African American Perspectives*. Winter, 2011.**
- **Carter VL, Dawkins NL, and Howard B. 2010. Health Lifestyle: A Community Based Approach to Cancer Risk Reduction. *Journal of Health Care for the Poor and Underserved.* 2010 Aug; Vol 21 (3) Supplement: 107-118.**
- **Dawkins NL, Carter VL, and Howard B. 2010. Responses to a health survey in preparation for a cancer awareness and prevention program. FASEB J, April 6, 2010, 24:558.11.**
- **Dawkins NL, Carter VL, and Howard B. Rural Community Engaged in a Cancer Prevention Program, Presented at Experimental Biology/FASEB, Dan Diego, CA , April 21-25, 2012.**

Summary

- Utilization of CHAs theoretical framework within the partnership
- Addressing the diversity within the three institutions and the populations they serve.
- Innovation of practices employed by our program and the relationships we have with our communities.

THANK YOU!!!