Healthy SC: Fulfilling Clemson's Land Grant Mission

September 10, 2015
A Population Health Extension Alliance
Envisioned By:

CLEMSON
SCHOOL OF HEALTH RESEARCH

CLEMSON
College of HEALTH, EDUCATION AND HUMAN DEVELOPMENT

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COOPERATIVE EXTENSION

CLEMSON
UNIVERSITY

PROVOST HEALTH TASK FORCE

GREENVILLE HEALTH SYSTEM
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For more information and an electronic copy of the Summit materials, please visit our new Clemson University School of Health Research website at www.clemson.edu/health-research
September 10, 2015 Population Health and Land Grant Universities Summit

Healthy SC: Fulfilling Clemson’s Land Grant Mission

Agenda:
8:30-9:00: Sign-in and Continental Breakfast

9:00-9:30: Welcome: Robert H. Jones, PhD, Provost and Executive Vice President for Academic Affairs
Program Introduction: Windsor W. Sherrill, PhD, Associate Vice President for Health Research
Chief Science Officer, Greenville Health System

9:30-11:00: Land Grant University Panel 1: Texas A&M and Oregon State University
Moderator: Thomas R. Dobbins, PhD
Director, Cooperative Extension Service
Clemson University

Leading Change: Developing a shared mission between population health and extension

Texas A&M
Susan Ballabina, Ph.D.
Associate Director for Program Development
Texas A&M AgriLife Extension Services
Julie Gardner, M.Ed
Program Specialist in Community Health
Texas A&M AgriLife Extension Services

Oregon State University
Sally Bowman, Ph.D.
Health Extension Administrator
Professor of Social and Behavioral Science
College of Public Health and Human Services

11:00 -11:15: Break

11:15-12:30 University Panel 2: University of Kentucky, University of New Mexico, and University of Oklahoma
Moderator: Brett Wright, PhD
Interim Dean
College of Health, Education, and Human Development
Clemson University

Programmatic leadership: Moving the needle in population health

Jimmy Henning, PhD
Associate Dean for Extension
Director, Cooperative Extension Services
University of Kentucky
James Mold, MD, MPH
George Lynn Cross Emeritus Research Professor
University of Oklahoma

Carolina Nkouaga
Associate Director of the Office of Community Health
University of New Mexico

12:30-1:30: PopTalks from Programmatic Exemplars: Clemson University

Boxed Lunch

Joel Williams, PhD, MPH
Associate Professor Public Health Sciences (PHS)
Sarah Griffin, PhD
Associate Professor PHS
Marge Condasky, PhD
Associate Professor Food, Nutrition and Packaging Sciences (FNPS)
Michelle Parisi, PhD, RD
Assistant Program Team Leader Food Safety and Nutrition Cooperative Extension

Julie Northcutt, PhD
Professor FNPS and Program Team Leader Cooperative Extension
1:30 - 1:45: Break

1:45-3:00: Envisioning a Population Health Partnership from a Health System Perspective: Greenville Health System

Moderator: Spence Taylor, MD
VP of Physician Engagement
President & Chief Academic Officer

Brenda Thames, EdD
VP for Academic and Faculty Affairs

Angelo Sinopoli, MD
Chief Medical Officer
VP of Clinical Integration

Malcolm Isley, MHA
VP of Strategic Services

3:00-3:15: Break

3:15-4:45: Break-out Session: Conceptualization of Program

Breakout Group A
Facilitators:
Thomas Dobbins, PhD
Brenda Thames, EdD
Room: Meeting Room I
Color: Yellow

Breakout Group B
Facilitators:
Lawrence Fredendall, PhD
Michelle Parisi, PhD
Room: Meeting Room III/IV
Color: Blue

Breakout Group C
Facilitators:
Brett Wright, PhD
Malcom Isley, MHA
Room: Meeting Room II
Color: Red

4:45-6:00: Reception
Clemson Summit Leadership
Robert H. “Bob” Jones is Clemson’s first executive vice president for academic affairs and provost, providing leadership for the university's undergraduate and graduate programs, academic support programs, research and public service activities. Dr. Jones earned his bachelor’s degree in forest management and master’s in forestry from Clemson and his doctorate in forest ecology from the State University of New York College of Environmental Science and Forestry, Syracuse University. He previously served as dean of the Eberly College of Arts and Sciences at West Virginia University and department head and professor of biological sciences at Virginia Tech.

Tom Dobbins received his bachelor’s degree in Agricultural Education and master's degree in Dairy Science from Clemson University, an associate’s degree in Agriculture from Abraham Baldwin Agricultural College, and his Ph.D. in Vocational-Technical Education from Virginia Tech. He currently serves as the director of Clemson's Cooperative Extension Service, as well as a professor and former chair of the agriculture division of Clemson’s School of Agricultural, Forest, and Environmental Sciences. Previously, he held various Extension positions including county agent, area agent, Extension associate, president of the Extension Senate, and editor of the Journal of Career and Technical Education. He is a member of the American Association for Agricultural Education and the National Association of Agricultural Education, South Carolina Association of County Agricultural Agents, and South Carolina Association of Extension 4-H Agents.
Dr. Brett Wright is Interim Dean of the College of Health, Education, and Human Development at Clemson University. He received his bachelor’s degree in Outdoor Recreation and master’s degree in Adult & Continuing Education from Morehead State University, before completing his Ph.D. in Recreation and Resources Development from Texas A&M University. He is a Fellow of the American Academy of Park and Recreation Administration, as well as Associate Editor of Leisure Sciences. His research interests include natural resource recreation, parks, technology and park management, environmental behavior, and partnerships.

Windsor Westbrook Sherrill serves as associate vice president for health research at Clemson and chief science officer at Greenville Health System. She is a professor in the Department of Public Health Sciences at Clemson and an adjunct professor at the University of South Carolina School of Medicine Greenville. Dr. Sherrill received her B.S. from Wake Forest University, her M.H.A. and M.B.A. from the University of Alabama at Birmingham, and her Ph.D. in Health Policy from Brandeis University. Dr. Sherrill’s research interests include medical and health management education, health finance and policy, and the evaluation of health services and health education programs for underserved groups. She has also worked on research projects funded by the National Institutes of Health, AHRQ, HRSA, and national and local foundations. Dr. Sherrill is a South Carolina Liberty Fellow and an honorary member of the Clemson University Class of 1939.
Healthy SC: Fulfilling Clemson’s Land Grant Mission
A Population Health Extension Alliance

Framework for Panel Discussions

**Scope of Program**

- How has your University partnered with health systems and other collaborators to build healthy communities and population health?
- How has your University developed programs in the area of population health?
- What advice would you have for us as we develop health extension and health system partnerships?
- With what innovative models of health extension has your University been involved? What populations and geographic areas are you serving?

**Chronology of Program Development**

- Give us an idea of the length of time it has taken from Concept to Reality to Present Day?
- What are realistic timelines for developing our Population Health Extension Program?

**Strategic Partnerships**

- What can South Carolina learn from your experiences?
- How did you get "buy-in" from external partnership?
- How did you get “buy-in” from Extension personnel?
- Were formal written agreements, legal entities developed?

**Funding Support/Strategies**

- What sources of funding does your program have for recurring and one-time costs?
- How much does your program depend on extramural grant funding and how successful have you been?
- Have the partnerships and collaborative aspects of the program provided strategic advantages in receiving grants?

**Tripping Hazards (Pitfalls, Minefields, Things to be Avoided)**

- What barriers have you experienced at your University/ with your partners to population health initiatives, health extension, and forming partnerships with health systems?
- What were the major challenges you faced in the implementation of the program?
- What major challenges do you foresee in the long-term sustainability of the program?

**Metrics (Evaluation Strategies, Assessment Tools)**

- How do you measure success of your program? How do your stakeholders and funders measure success?
- Are you improving health status?

**Reflections**

- In hindsight, is there anything you wish you had done or done differently?
Panel 1
Texas A&M University
Oregon State University

*Leading Change: Developing a shared mission between population health and extension*
Susan Ballabina, Ph.D.
Associate Director for Program Development
Texas A&M AgriLife Extension Service

Susan Ballabina received her master's degree in Communications from Stephen F. Austin State University, and her Ph.D. in Public Affairs from the University of Texas at Dallas. She joined AgriLife Extension in 1994 and served as an agent in Cherokee, Williamson, Upshur, and Dallas counties. In 2005, she became a regional program director, and in 2013 she was named the associate director for program development for the Texas A&M AgriLife Extension Service.

Dr. Ballabina’s experience, leadership, and innovative vision for Extension programs have led to major initiatives and outreach programs, including Walk Across Texas, Step Up and Scale Down, and Winning with Nutrition. She has been awarded AgriLife Extension Service’s Extension Superior Service Award three times and has also been recognized by the Texas Extension Association of Family and Consumer Sciences for her work.

Dr. Ballabina has led collaborative efforts with the Texas A&M Health Science Center and School of Public Health to obtain approval for a new Institute of Public Health Information and to secure new state general fund support for the Healthy South Texas initiative, which includes 27 counties in Texas. She has also worked to seek out and establish important partnership opportunities, like a recently-created partnership with Baylor Scott & White Health, the largest non-profit health care system in Texas.

Julie Gardner, M.Ed.
Program Specialist in Community Health
Texas A&M AgriLife Extension Service

Julie Gardner received her master’s degree in Education Administration in 2000 from Tarleton State University. She is currently pursuing a doctorate in Health Studies at Texas Woman’s University, with a concentration in Population Health. She has worked at AgriLife as an assistant agent for home economics, a 4-H and youth development agent, and a family and consumer sciences agent.

As a community health program specialist, Julie works to provide leadership for program implementation by partnering with AgriLife Extension agents and administration from Scott & White Health Plan. She is involved with AgriLife Extension initiatives such as Dinner Tonight!, Step Up and Scale Down, and Walk Across Texas—programs that encourage community wellness and healthy lifestyle choices.
Dr. Bowman is a professor and Health Extension administrator at OSU. She received her master's degree in Sociology from Auburn University, and her Ph.D. in Sociology from the University of Oregon. Dr. Bowman is a member of the Human Development & Family Sciences Program, and she is also the co-director of the Parenting and Family Life Core at the Hallie Ford Center for Healthy Children and Families. Her research focuses on family caregiving, rural community development, innovative educational methods, and families in poverty. She is currently the Principal Investigator on a preventative health program that aims to reduce chronic health conditions through education and changes in policy, systems, and environments, especially in limited-resource communities. Dr. Bowman also works with Oregon Health Authority to deliver a physical activity program for older adults. She is also the senior associate director of the Oregon Geriatric Education Center, a center that offers geriatric training to health professionals who work in rural areas of Oregon.

In 2004, she was awarded the OSU Extended Education Faculty Achievement Award, and in 2009 she received the OSU Faculty Senate's D. Curtis Mumford Faculty Service Award.
Panel 2
University of New Mexico
University of Kentucky
University of Oklahoma

Programmatic Leadership: Moving the needle in population health
Carolina Nkouaga currently serves as the Associate Director of the University of New Mexico Health Sciences Center Office for Community Health, where she has collaborated on the development of the health extension model and various community health worker initiatives, as well as the implementation of the University's strategic goal to work with community partners to improve the health and health equity in the state of New Mexico more than any other state by the year 2020. Working with a network of 18 states around the country, she created an online toolkit with resources for implementing health extension, available at www.healthextensiontoolkit.org. Carolina is passionate about the development of both local and national collaboration between health extension and cooperative extension, and has been a key driver in the community health worker model in New Mexico, which is currently being replicated in many other states. She draws on her experience of working in indigenous communities throughout Latin America on community development projects, as well as the Bahá’í principles of unity and service, to guide her work.

Dr. Henning is a graduate of the University of Georgia and the University of Kentucky College of Agriculture. He received his Ph.D. in Agronomy/Ruminant Nutrition from the University of Kentucky in 1986. After working at the University of Missouri as a Forage Extension Specialist, he joined the University of Kentucky in 1990. He served previously as the assistant director and program leader for Agriculture and Natural Resources. During this time, Dr. Henning worked to strengthen the state agriculture advisory council system as well as to emphasize agent training and development.

As leader of the UK Cooperative Extension Service, Dr. Henning works to fully leverage the value of campus faculty and specialists with the extensive network of agents, support staff and local offices to improve the lives of the citizens of Kentucky. University of Kentucky Extension has identified Health (specifically Healthy Lifestyle Choices) as one of the high priority Strategic Initiatives for the UK Extension system.
Dr. Mold received his undergraduate Bachelor of Science Degree at the University of Michigan, and his medical degree from Duke University School of Medicine. He completed a residency in Family Medicine at the University of Rochester/Highland Hospital and a Master of Public Health with a Biostatistics concentration at the University of Oklahoma Health Sciences Center. He practiced in a small town in N.C. before joining the faculty at the University of Oklahoma Health Sciences Center in 1984. Since 1994 he has been involved in practice-based research within a network that he organized called OKPRN. His research has been funded by numerous national and local agencies, such as NIH, NCI, AHRQ, RWJF and AAFP. For the last six years he has spearheaded national efforts to establish an extension system to support primary health care.

In 2008 Dr. Mold was elected to the Institute of Medicine (now the National Academy of Medicine), an organization that assists government agencies and the private sector in making decisions to improve health. Individuals who are elected to the Institute of Medicine are recognized as having demonstrated exceptional commitment to service, as well as professional achievement. His research interests include interdisciplinary health care, patient-centered (goal-directed) care, and the translation of research into practice and practice into research. Dr. Mold is now retired and lives in Chapel Hill, N.C., but he continues to be involved, as a consultant, in the development of primary healthcare extension in Oklahoma.
Pop Talks
Ideas and inspirations from Clemson’s Population Health thought leaders
Dr. Williams received his B.S. degree in exercise studies and sports medicine from Lander University, and his M.P.H. and Ph.D. degrees in health promotion, education and behavior from the University of South Carolina Arnold School of Public Health. He has also completed postdoctoral training at the University of South Carolina in pediatric obesity prevention and health promotion through the Department of Psychology and a Certificate of Graduate Study in applied statistics through the Department of Statistics. He has worked as a Certified Athletic Trainer in the outpatient physical therapy setting, a Certified Health/Fitness Instructor for a hospital system, and as a Chronic Disease Program Evaluator for the SC Department of Health and Environmental Control. Prior to coming to Clemson, he was an Instructor in Family and Community Medicine at Wake Forest University School of Medicine. From 2007-2010, Joel was an Extension Specialist with Clemson Cooperative Extension. He is now a tenured Associate Professor in Public Health Sciences. Dr. Williams’ research interests include community-based programming, behavior change interventions, and improving chronic disease patient self-management. He is currently a Clemson Embedded Scholar with Greenville Health System where he is collaborating with clinicians in the Department of Pediatrics.

Dr. Griffin received her bachelor’s degree in Biology from Winthrop University, and her M.P.H. and Ph.D. in Health Promotion and Education from the University of South Carolina. Before joining Clemson’s Department of Public Health Sciences in 2006, she was a research associate professor in the Prevention Research Center at the University of South Carolina. Her research focuses primarily on eliminating health disparities related to obesity among underserved minority populations. She has worked on several projects funded by the National Institutes of Health, the U.S. Department of Agriculture and national and local foundations. Dr. Griffin is currently working to assess the effectiveness of primary prevention or health management. Two of her current projects are community-based prevention efforts in predominately rural South Carolina.
Dr. Michelle A. Parisi is an Extension Associate and Assistant Program Team Leader for the Food Safety and Nutrition Extension Program Team. She is a Registered Dietitian with a Master of Science Degree in Clinical Nutrition from Rush University and a Ph.D. in Food Technology from Clemson University. Dr. Parisi has over 20 years of experience in Nutrition and Food Science and has experience working as a Community Nutritionist, Clinical Dietitian, Nutrition Research Associate, and Professor of Nutrition and Food Science. She conducts research in areas of Food Safety and Microbiology, Food Quality, Sustainable Agricultural Systems and Nutrition Education. Dr. Parisi serves throughout the state of SC and works with Food Safety and Nutrition Extension Agents in program and curriculum development and evaluation.

Julie Northcutt, Ph.D.
Program Team Leader, Cooperative Extension
Professor of Food, Nutrition, and Packaging Sciences Clemson University

Dr. Northcutt received her Ph.D. in Food Technology with a minor in Biochemistry from North Carolina State University. Before joining Clemson University, she was a professor at the University of Georgia (1995-2001) and a lead scientist and research project leader for the USDA (2001-2008). In addition to her research and teaching activities in the Department of Food, Nutrition and Packaging Sciences, Dr. Northcutt serves as the Program Team Leader for the Food Safety and Nutrition Program Team within Clemson University’s Cooperative Extension Service.

Margaret Condrasky, Ed.D., R.D., Certified Culinary Educator
Associate Professor of Food and Nutrition
Clemson University

Dr. Condrasky received her bachelor’s degree in Medical Dietetics from the Pennsylvania State University, followed by her master’s in Foods and Nutrition from Indiana University of Pennsylvania and her Ed.D. in Vocational and Technical Education from Clemson University. Her teaching is in the area of healthy food product development, nutrition sciences, and food service management. She is a member of the Academy of Nutrition and Dietetics, the Research Chefs Association and a Certified Culinary Educator with the American Culinary Federation. Her research interests include culinary nutrition outreach programs and culinary professionals’ educational initiatives.
Under His Own Vine and Fig Tree

Joel E. Williams, MPH, Ph.D.
Associate Professor
Public Health Sciences

"If we had a pill that conferred all the benefits of exercise, we would recommend it to every patient."

Robert E. Sallis, MD, FACSM
"You cannot make the farmer change his methods...unless you show him, under his own vine and fig tree as it were, that you have a system better than the system which he himself has been following"
Improving Health Through Cooperative Extension Service and EFNEP

Julie K. Northcutt, Ph.D.
Professor, Department of Food, Nutrition & Packaging Sciences
Extension Program Team Leader, Food Safety & Nutrition Program
Cooperative Extension Service
Clemson University

Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, sex, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer.

• Cooperative Extension Service
  – Smith-Lever Act 1914 (USDA-NIFA)
  – Community educational and developmental needs through land-grant Universities, including “improving life and health”
• Clemson University’s Food Safety and Nutrition Program
  – Food Safety
    • Consumers (ServSafe, *Carolina Canning, *Food4Gatherings)
    • Food Processors (HACCP, *Food2Market, Thermal Processing, Shelf-life/formulation)
  – Nutrition
    • Consumers (Healthy Lifestyles, *Youth Preservation)
    • Clinical (Sand Hills Medical Foundation, Office of Aging, Health Care Facilities)
    • Food Security (*EFNEP)
• EFNEP – Expanded Food & Nutrition Education Program
Serving

- EFNEP focuses on nutrition education and life-skills for children, youth, and young families with limited resources
  - EFNEP reaches over 500,000 families and youth each year in the 50 States, U.S. territories and D.C
  - Eighty percent EFNEP families live at or below 100% of poverty
  - Nearly 70% of EFNEP families are minority status
- Poor health disproportionately affects minorities and limited resource audiences

Collaborating

- Government Agencies:
  - USDA (various agencies)
  - Center for Disease Control and Prevention
  - SC Department of Education
  - SC Department of Social Services
    - SNAP-ED, After School Programs, Summer Food Service Program,
  - Lt. Governor’s Office on Aging
  - SC Regulatory Agencies (SCDA, SCDHEC)
    - WIC; Farmer’s Markets Programs
- Others:
  - Local Public Schools
  - Career Training Programs
Transforming

- Education on nutritionally sound food purchases and preparation practices
  - Leads to public savings (better health with reduced health care costs)
  - Less absenteeism from work
  - Less dependency on emergency food assistance

- Increased impact in future
  - Continue utilizing the proven track record of Extension in health-related programs
  - Bridges the gap between research and practical application
  - Increases impact in ‘hard-to-reach’ communities
Culinary Nutrition
Monthly group cooking classes

Marge Condrasky, R.D., C.C.E.
Food, Nutrition & Packaging Sciences
Department

Impacting
Culinary Nutrition focus within the New Impact – a Healthy Lifestyle Program of the Children’s Hospital of Greenville Health System.

Serving

- Children and their families whereby obesity impacts both lives and health.

- Undergraduates and graduate students in preparing them for future nutrition and culinary professionals.


Collaborating

**Teaching:** Health promotion with Nutrition and Culinology® Food Sciences academics, and

**Research:** Undergraduate Student led research teams and graduate students partner in the design and testing of recipes as well as in the creation of food demonstrations, to align with

**Outreach** opportunities in the community setting.
Transforming

- Nutrition knowledge combined with culinary skills and a measure of motivation to plan and prepare healthy meals and snacks at home has been demonstrated to empower healthy food choices for children and families.
- Next steps are to investigate opportunities to build onto existing child cooking and nutrition outreach and to pilot and test the next phase of enhanced culinary nutrition experiences for children.
Faithful Families Eating Smart & Moving More: Colleton County

Sarah Griffin
Associate Professor
Public Health Sciences
Transforming
Building Bridges For SC Farm-to-School Initiatives

Dr. Michelle Parisi, RD
Assistant Program Team Leader
Food Safety and Nutrition Team
Clemson Cooperative Extension Services

Minimum standards are designed to
• promote sound nutrition
• student health
• reduce childhood obesity
• provide transparency on the school nutrition environment

The Healthy, Hunger-Free Kids Act of 2010 (HHFKA)
Collaborating

Impacting The Hurdles in SC Schools for Meeting The Dietary Recommendations for Kids

Biological determinants

Psychological determinants

Physical determinants

Social determinants

Economic determinants

Attitudes, beliefs, and knowledge

Farm to School Initiative

ChooseMyPlate.gov
Transforming

South Carolina is bringing the farm to school

In the great state of South Carolina there are approximately 81 public school districts, 65 of which completed the USDA Farm to School Census. 38 districts representing approximately 674 individual schools with an estimated 471,063 children in attendance are bringing the farm to school.
Panel 3
Greenville Health System

Envisioning a Population Health Partnership
from a Health System Perspective
Dr. Sinopoli received his bachelor's degree in Biology from the University of South Carolina, and his medical degree from the Medical University of South Carolina. He came to Greenville Health System for his residency and returned to become a faculty member of the pulmonary critical care department. He is board certified by the American Board of Internal Medicine, Pulmonary Medicine and Critical Care Medicine, and he is also a professor at the University of South Carolina School of Medicine.

At Greenville Health System, Dr. Sinopoli has worked to develop a regional clinical integration network, as well as to develop population health and business health programs. His leadership has led to healthcare delivery initiatives that emphasize quality, efficiency, and related physician alignment.

Dr. Thames received her master's degree in Guidance and Counseling and her Ed.D. in Vocational and Technical Education from Clemson University. Prior to joining Greenville Health System, she was the associate dean for research and graduate studies in the College of Health, Education and Human Development at Clemson.

At Greenville Health System, Dr. Thames works with the GHS Clinical University, a unique academic health center formed by a partnership between GHS, Clemson University, Furman University, and the University of South Carolina. She provides strategic direction and leadership for workforce development and education initiatives, and also works with regional schools, colleges, and universities to create partnerships that advance health care.
Malcolm Isley
Vice President of Strategic Services
Greenville Health System

Malcolm Isley received his bachelor's degree from North Carolina State University, and his master’s degree in Health Administration from Duke University. Before he joined Greenville Health System, he served at Duke University Health System as associate vice president of business and network development.

At Greenville Health System, he oversees strategic planning and strategy development, business and network development, marketing, communications, and affiliations.

Mr. Isley also serves as President of Initiant Health Collaborative, which is owned by Greenville Health System, MUSC, Palmetto Health, Self Regional Healthcare, and McLeod Health. Initiant’s purpose is to reduce costs and increase efficiencies for its member organizations through collaborative activities.

He is also a member of the YMCA Metro Board, and serves on his church’s Staff Parish Relations Committee.

Spence M. Taylor, M.D.
Vice President of Physician Engagement
President & Chief Academic Officer of GHS Clinical University
Greenville Health System

Dr. Taylor received his bachelor’s degree in Biochemistry from Clemson University and his medical degree from the Medical University of South Carolina, before joining Greenville Health System in 1992. He is certified in general surgery and general vascular surgery by the American Board of Surgery, and is a registered vascular technologist. Dr. Taylor serves as president of the Southern Surgical Association and a director of the American Board of Surgery. He also holds academic appointments at Clemson University, University of South Carolina School of Medicine Columbia, and the University of South Carolina School of Medicine Greenville.

At Greenville Health System, Dr. Taylor is responsible for the oversight of all academic initiatives as well as providing leadership and strategic direction of the GHS Clinical University. Dr. Taylor has also served as Chairman and Program director of GHS’ Department of Surgery, Vice President of Academics, and Executive Director of the University Medical Group at GHS. His leadership has resulted in unprecedented growth and advancement in academics at GHS, including the start of the University of South Carolina School of Medicine Greenville and the GHS Clinical University. Dr. Taylor is also the Senior Associate Dean for Academic Affairs and Diversity for the University of South Carolina School of Medicine Greenville.
Healthy SC: Fulfilling Clemson’s Land-grant Mission
Framework for Breakout Discussions
BREAKOUT SESSIONS 3:15 PM – 4:45 PM

Breakout Group A
Facilitators: Thomas Dobbins, PhD
            Brenda Thames, EdD
Room: Meeting Room I
Color: Yellow

Breakout Group B
Facilitators: Lawrence Fredendall, PhD
            Michelle Parisi, PhD, RD
Room: Meeting Room III/IV
Color: Blue

Breakout Group C
Facilitators: Brett Wright, PhD
            Malcom Isley, MHA
Room: Meeting Room II
Color: Red

Participants are asked to go to the meeting room matching the color of dot present on your nametag.

Breakout sessions will be interdisciplinary groups representing Clemson and external stakeholders. Your participation is appreciated as we discuss the following questions:

• What innovative models of health extension would be well suited for Clemson? What populations and geographic areas could we serve?
• How can Clemson partner with health systems and other collaborators to build healthy communities and improve population health?
• How do we get “buy in” from external partners and internal stakeholders?
• Who is the “workforce” who can help us accomplish health extension and population health management?
• What barriers do we have at Clemson and with our partners to population health initiatives, health extension, and forming partnerships with health systems?
• What are potential sources of funding for our programs?
• How do we measure success of our program? How do our stakeholders and partners measure success?
Institutional Resources
Healthy South Texas 2025

FY 2016 & 2017 Exceptional Item

Overview
Texas A&M Health Science Center will lead a comprehensive, regional effort in collaboration with Texas A&M AgriLife Extension and other A&M assets to reduce preventable diseases and their consequences in South Texas by 25 percent by the year 2025.

This unprecedented initiative will organize evidence-based education, monitoring and interventions to prevent disease and improve public health through an integrated Texas A&M Institute for Public Health Improvement (IPHI). The A&M IPHI will focus initially on the highest impact diseases in the region, including diabetes, asthma, and infectious disease, with the potential to save the state tens of millions in health care costs annually. Through Texas A&M’s one-of-a-kind statewide county extension presence and the establishment of long-term partnerships with the region’s hospital systems, providers and Medicaid Managed Care Payors, the Texas A&M IPHI will reduce Medicaid expenditures associated with preventable diseases. In the future, the Institute will seek to expand the program to improve the health of communities across the state.

Benefit to Texans
- Diabetes Prevention and Control: Empower patients via access to evidence-based education and monitoring in areas including prenatal care, weight management, and nutrition.

Requested Amount (biennial): $15 million

Objective
To reduce preventable diseases and their consequences in South Texas by 25 percent by the year 2025.

Region
26 counties in South Texas, with plans to expand after initial 2-year pilot

Revised 12/01/14
Focusing on high-impact diseases could save the state tens of millions in health care costs annually.

**Outcomes**

- Reduce health care costs for the state, payors and employers
- Reduce emergency department visits and hospitalizations related to preventable diseases
- Reduce diabetic-related complications including kidney failure, amputations, and blindness
- Reduce costs and lost productivity related to uncontrolled asthma, infectious disease and other conditions

**Two-Year Goals**

- Establish an integrated model and expand programs and partnerships
- Prove tangible outcome benefits in reduced health care utilization and costs
- Double the number of patients served by programs to address uncontrolled diseases
- Increase by four times the number of people reached by educational and preventative programs
- Develop a plan to scale to 10 times the current population served in years 3-4

Focusing on the highest impact diseases in the region, including diabetes, asthma and infectious disease, Texas A&M IPHI will bring together experts from medicine, nursing, pharmacy, biomedical science, public health, and extension to engage families, enhance education, promote behavior change, and improve quality of medical care and disease outcomes in the region.

The underserved health needs of South Texans, combined with the proximity to the border and the vibrant cultural and economic fabric of the region, create an opportunity to launch this innovative approach designed to address critical needs, while developing tools, technologies and strategies that can be applied to public health challenges around the state and nation.
Texas A&M Launches ‘Healthy Texas Initiative’ – A Land Grant Approach to Healthier Lives

June 17, 2014 by Holly Shive

John Sharp, chancellor of The Texas A&M University System, and Brett P. Giroir, M.D., CEO of Texas A&M Health Science Center, along with Senator Juan “Chuy” Hinojosa, today announced the launch of the Healthy Texas Initiative as part of the newly created Texas A&M Institute for Public Health Improvement. The combined efforts of the Texas A&M Health Science Center and Texas A&M AgriLife Extension Service will develop and deliver evidence-based education, monitoring and interventions that will prevent disease and improve public health in Texas. The initiative’s pilot program, known as “Healthy South Texas 2025,” marks an unprecedented effort to reduce preventable diseases and their consequences in South Texas by 25 percent by the year 2025.

“We will leverage impactful research spanning agriculture and human health to better serve the state and nation,” Sharp said. “Just imagine, on one end of the county, our agriculture extension agent is talking to farmers and ranchers about growing healthy crops and livestock. On the other end of the county, our health science center personnel, utilizing the assets of our extension service, are talking to families about how to grow healthy children. This will keep people out of hospitals while saving billions of dollars.”

Focusing on the highest impact diseases in the region, including diabetes, asthma and infectious disease, Healthy Texas brings together experts from medicine, nursing, pharmacy, biomedical science, public health, architecture and extension to engage families, enhance education, promote behavior change, and improve quality of medical care and disease outcomes.

“I am honored to be here today, introducing an initiative that will have such an immediate and profound impact on the lives of all Texans, but especially South Texans with the pilot program. It makes sense to me that the Texas A&M System would use its renowned presence in the state’s 254 counties with agricultural extension and the health science center’s multi-campus presence in my native South Texas to improve overall health and wellness,” Hinojosa said.
“The Healthy Texas Initiative is an exciting new endeavor that reinforces our message of ‘prevention is the solution.’ By teaching Texans to take personal responsibility over their own health, we can reduce the burden of costly, preventable diseases like diabetes and grow healthier communities,” said Senator Jane Nelson, chair of the Senate Health & Human Services committee, in contributed remarks. “I applaud Texas A&M for their innovative approach and am looking forward to seeing this program put into place.”

Leveraging existing regional assets, the initiative merges expertise from across Texas A&M Health Science Center campuses in Corpus Christi with the Texas A&M Coastal Bend Health Education Center and Texas A&M College of Medicine; Texas A&M Rangel College of Pharmacy in Kingsville; Texas A&M School of Public Health and Texas A&M College of Nursing in McAllen; Texas A&M Institute for Biosciences and Technology in Houston; along with the Texas A&M College of Architecture’s Colonias Program, Texas A&M University-Corpus Christi and Texas A&M AgriLife Extension Service, currently present in every county. Additionally, in partnership with the region’s Medicaid Managed Care payers, Healthy Texas will reduce the overall Medicaid expenditures associated with preventable diseases.

“Texas A&M Health Science Center is leading the charge to bring the right players to the table, working together to develop signature academic health programs designed to impact patient populations while training the next generation of health care professionals in an innovative, multi-disciplinary setting,” Giroir said. “This has been in planning for more than two years, yet the results will have lasting implications on the health and wellness of South Texas for generations to come.”
The partnership project between Texas A&M AgriLife and Scott & White Health Plan continues to reach people across central Texas with health information and education. This outreach empowers individuals with the necessary tools to make positive decisions in regards to their health; these decisions can help them prevent or better manage chronic diseases.

METRICS AND MILESTONES

Metrics were set for each of the partnerships program which include Step Up & Scale Down, Dinner Tonight, and Walk Across Texas. This chart provides an update to the metrics for this project. It is estimated that all metrics will be met or exceeded during the fourth quarter of this project.

DINNER TONIGHT HEALTHY COOKING SCHOOLS

The goal of the project was to provide five Dinner Tonight Cooking Schools within the identified counties of Bell, Brazos, Llano, McLennan, and Williamson; this metric has been exceeded. In addition to these counties, healthy cooking schools were conducted in Lampasas, Burnet, San Saba and Mills counties. Cumulatively, 491 people have learned to plan menus, cook healthier, and reduce their risk of chronic disease via nutrition.

STEP UP & SCALE DOWN

Currently there have been six Step Up & Scale Down series completed with an additional eight either in progress or scheduled to begin in September. To date, 118 participants have completed SUSD with 74 of those being SWHP members; 63 others are currently enrolled in a SUSD program.

WALK ACROSS TEXAS

Three of the five mandatory Walk Across Texas programs have been conducted. Those completed include Brazos, Bell, and McLennan counties. The Walk Across Texas program is an eight week program that promotes physical activity in a team effort. Over 1200 individuals have completed the program with the largest participation in Brazos County.
OUTREACH EFFORTS

- In order to provide outreach to school districts, AgriLife Extension has prepared a “Teach Well” document. This document outlines partnership programs and a potential timeline for success when implemented within school.

- Employer group outreach meetings are vital to program success. During these meetings, wellness offerings which include Health Risk Assessments, Step Up & Scale Down, Walk Across Texas, and Dinner Tonight are discussed with the employer group. During the 3rd quarter, joint meetings were held with Manor ISD, City of Temple, Temple ISD, and MTC. As a result, Manor ISD will be conducting the Walk Across Texas program in the fall with the Maintain No Gain program to be implemented during November/December. In addition, Step Up & Scale Down has been planned for City of Temple and City of Killeen.

- AgriLife Extension and SWHP attended the annual Corporate Wellness Luncheon in order to promote worksite wellness programs to those companies within the Central Texas area.

- Julie Gardner and Sharon Johnson attended a Health Literacy Symposium sponsored by University of North Texas Health Science Centers. This symposium addressed the need for health literacy among health workers, best practices for reaching clientele, and strategies to develop a community of wellness.

- The Mayors Fitness Council meeting was attended by Julie Gardner and David Hoellen. This group meets on a monthly basis and can offer new opportunities for expansion within the community of Temple.

- Coordin8 Conference was attended by Julie Gardner who served as a representative for both AgriLife and SWHP. This event, sponsored by Region 12 Education Service Center, educated nurses and social workers on various health issues. In addition to the classroom component, participants attended the vendor expo. At this vendor expo, AgriLife and SWHP programs were displayed and explained. As a result of this conference, nine school districts who are SWHP members indicated an interest in wellness programs.

FUTURE GOALS

- Future goals for this partnership include establishing effective partnership and program goals for 2015-2016. This includes identification of key areas within the SWHP service area to concentrate efforts; it also includes the establishment of a contract that will extend the partnership to new locations.

- Continue programming efforts of Step Up & Scale Down within employer groups and communities.

- Develop a plan to utilize the Master Wellness Volunteer Program with employer groups and community members.
About the Oregon Center:

The purpose of the Oregon Center for Health Innovation is to engage in the discovery of innovative solutions to Oregon's most pressing health and wellness issues, and to build the capacity of current and future professionals engaged in health service for Oregonians.

- Driven by a spirit of curiosity, creativity, and **engaged scholarship**.
- Foreshadows a **compelling future** for the health of the nation.
- Utilizes a **public health approach** that values upstream thinking, population health and data-informed policy and practice.
- **Leverages the spirit of the land grant tradition and university strengths** in Public Health and Human Sciences, Engineering, Business, Extension Service and others.
- Results in **collective impact** and **distributed benefits**.
- Supports the emergence of **recognizable areas of prominence**.

Goals

1. **Provide institutional support for a diverse portfolio of projects emerging from durable partnerships with industry, organizations, and communities aimed at discovering innovative solutions to contemporary health and wellness issues.**

   Likely areas of work include community assessment and change, program and policy evaluation, technological innovations, big data analysis, thought leadership, technical assistance, translational science, community-engaged research, and entrepreneurial start-ups.

2. **Strengthen the public health workforce through a robust array of professional development offerings for practicing professionals and increased experiential learning opportunities for students.**

   Likely areas of work include continuing education, professional development, field-altering think-tanks and institutes, experiential learning for students, and partnerships with relevant organizations and other entities.
Improving Population Health Through Extension in Oklahoma

Jim Mold, MD, MPH
George Lynn Cross Emeritus Research Professor, Department of Family and Preventive Medicine, OUHSC

OKPRN

- Oklahoma Physicians Resource/Research Network (OKPRN)
- Founded in 1994
- 276 clinician members in 145 practices
  - 165 MDs, 56 DOs, 21 PAs, 21 ARNPs
  - 226 FPs, 11 internists, 16 pediatrics, 23 other or unknown
- 48% rural, mostly small (mean 2.2 clinician) practices
- 95 peer-reviewed research publications (www.okprn.org)
QI Research in OKPRN

- Began in 2000
- Focused primarily on improving delivery of preventive services in primary care
- Developed, refined, and tested a multi-component implementation intervention
  - Performance feedback (baseline and monthly)
  - “Academic detailing” (peer-to-peer strategic planning)
  - Identification and sharing of best practices
  - QI facilitation by practice enhancement assistants (PEAs)
  - IT support including development of a comprehensive registry/health planner

Practice Facilitation

- MPH with special training in PC and QI
- One half-day per week for 6 months
- Resource acquisition and development
- Monthly chart audits with feedback
- Staff training and encouragement
- QI (PDSA) cycle facilitation
- Canadian meta-analysis
  - Improves practice performance in a dose-response fashion
  - Cost effective when benefits of preventive services considered

Relationships with practice critical
- Takes several months to develop
Primary Care Extension

- Importance of relationships and local presence
- Similar to extension in agriculture and manufacturing
- Affordable Care Act; Section 5405: Primary Care Extension Program
- Assigned to the Agency for Healthcare Research and Quality (AHRQ) with no additional funding

IMPaCT

- Four 2-year, $1 million awards to PA, NC, NM, and OK
- In OK: Turning Point Partnerships, county health improvement plans (HD), Health Access Networks (Medicaid), CMMI model for reducing hospital readmissions (QIO)
- Primary healthcare vs. primary care; focus on social determinants (NM)
- Certified County Health Improvement Organizations (CHIOs)
  - OK Primary Healthcare Extension System (OPHES)
  - Public Health Institute of Oklahoma (PHIO) as hub
CHIO Certification Criteria

- One or 2-3 contiguous counties
- 501c3 or 501c3 affiliation
- Mission to improve health of population
- BOD includes (minimum): public health, mental health, social services, primary care, hospital(s)
- Endorse the county health improvement plan
- Process in place for strategic prioritization
- Capacity to manage volunteer activities

County Health Improvement Organization (CHIO) Counties
Resources for Primary Care Practices

Oklahoma Primary Healthcare Improvement Cooperative (OPHIC)
- Located within the OK Clinical and Translational Science Institute
- Project-specific funding
- Hoping for health insurance company support (e.g. medical loss ratio, care coordination, etc.)
- Hoping for SIM grant support

EvidenceNow (AHRQ)
- Seven $15 million grants to IL/IN, NYC, NC, WA/OR/ID, CO/NM, VA, and OK
- Continue to build the primary care extension system to move patient-centered outcomes research into practice (Patient-Centered Outcomes Research Institute)
- Support efforts to reduce cardiovascular events by increasing use of aspirin, managing BP and lipids, and encouraging smoking cessation (ABCS; Million Hearts Initiative)
- Evaluate the impact of various QI approaches used by the seven different initiatives
Summary

Improvements in population health will be best accomplished at the local level

- This will require an effective, credible infrastructure that can develop, attract, and manage both internal and external resources
- Key players are public health, primary care, mental health, social services, and hospitals

Primary medical care is an important component of primary healthcare extension

- Performance feedback, peer-to-peer discussion, practice facilitation, and IT support are required
- Personal relationships are key
- This requires a set of distributed resources that don’t currently exist or are not well-organized
To be considered a County Health Improvement Organization (CHIO), an organization must generally meet the following criteria. (Note: Exceptions must be approved by the Board of Directors of PHIO.)

1. Ideally, the organization should have a broad community health improvement mission such as a Turning Point partnership. Other organizations will be considered for approval by PHIO.

2. The organization must:
   a. Be an independent non-profit (e.g. 501c3);
   b. Establish an affiliation agreement with the Public Health Institute of Oklahoma (PHIO); or
   c. Be affiliated with a non-profit partner that meets all of the other criteria.

3. The geographical area served should correspond to one county or a geographically contiguous cluster of no more than four counties and should not include counties covered by other CHIO certified organizations.

4. The organization’s mission should include improving the health and health care services available to all citizens within the geographic area served.

5. The organization must have a Board of Directors (BOD) that shall include representation from the following community sectors, if available, in the county or counties:

   - **Primary Care** - One or more primary care clinician(s) (can be a physician, advanced practice nurse, or physician assistant) Committee.
   - **Public Health** - The county health department administrator or designee;
   - **Mental Health Organization** - The Community Mental Health Center or the Area Regional Prevention Center Director or designee;
   - **Social Services** - The County Department of Human Services director or designee;
   - **Hospital Representative** - The CEO of the hospital. If there is more than one hospital, this should be the Chair of a Hospital CEO Advisory Committee composed of the CEOs of all hospitals in the county or designee;
   - **Coalition representation** - The Chairperson of the County Turning Point Coalition and/or other coalition member representative; and
   - **Other Community Representatives** - important population subgroups, particularly under-represented minorities, and advocates for children and older adults

**Recommended** additional representation shall include the following:

- **Representatives from faith communities**
6. **The organization shall have a board or committee** structure that assures it can both receive input from and effectively disseminate information to the identified board sectors and the communities they represent and serve. It is required that there shall be a standing Primary Care Advisory Committee (PCAC) or group similar to that includes representatives from at least 5 primary care practices or at least 50% of the primary care practices in the county/ies served by the CHIO. The Chair of the PCAC shall be a member of the BOD of the CHIO with both entities serving to exchange information and input. The chair shall provide input from the PCAC at each BOD meeting. That input could be obtained in a variety of ways (e.g. specific PCAC meetings, discussions at other meetings (e.g. hospital staff meetings), e-mails, personal contacts, etc.

7. The organization should endorse and adopt the **County Health Improvement Plan (CHIP)** for the County(s) (or group of counties). Note: Board members are encouraged to obtain training in the MAPP – Mobilizing Action through Planning and Partnerships assessment and planning process offered by the Oklahoma State Department of Health.

8. The organization must have a **set of policies and procedures** that define a process for deciding upon and prioritizing acceptance of and distribution of resources/funds.

9. The organization should be organized in such a way that there is an appropriate balance of influence from the agencies and organizations listed in requirement 5. That is, no single agency or organization represented on the Board should have undue influence over the assessment of health and health care priorities or opportunities.

10. The organization should have or have developed a plan to develop the capacity to recruit and supervise community volunteers (example: this may also be reflected in organization’s by-laws and or procedures)

*CHIO re-certification is required every three years from Certification date.*

All applications must be sent with required materials to info@publichealthok.org or mailed to:

Public Health Institute of Oklahoma
PO Box 60926
Oklahoma City, OK 73146
info@publichealthok.org

For more information visit www.publichealthok.org/CHIO
ABSTRACT
Lessons learned and practiced in agriculture for 100 years are now informing the development of a primary care extension program that has the potential to provide substantial support for primary care practices throughout Oklahoma and to make it easier for all agencies and organizations working to improve our state’s health to do so more effectively.

BACKGROUND
A Brief History of Cooperative Extension
When our country was founded, the founding fathers correctly calculated that agriculture would be critical to the success of the young nation, and they were concerned that most farmers weren’t practicing “evidence-based” farming. Poor plowing methods, failure to rotate crops, and other antiquated methods resulted in inefficient production and soil exhaustion. Poor coordination led to shortages of some crops and overproduction of others. Over 50% of the American workforce was involved in farming, reducing the number of adults available to other vital occupations. Food availability was unpredictable, prices were high, and quality was uneven. In his book, Taking the University to the People, Rasmussen recounts the steps taken to bring science into agriculture, steps that parallel those now being taken in health care for similar reasons. In 1796 George Washington proposed an office to promote dissemination and diffusion of modern agricultural methods. However, this had little impact. In 1810 the first agricultural journals were published, but readership was low. Frustrated, by the reluctance of established farmers to accept scientific methods, in 1862, Congress passed the Land-Grant College Act intended to train a new generation of evidence-based farmers. However, enrollment was less than anticipated. Many thought they could learn better by doing than by studying, and, they were needed on the farms. In fact, there was limited practical material to teach since much of the research wasn’t well matched to the day-to-day needs of farmers. The agricultural colleges mostly taught farm operations. In order to address concerns about the disconnect between research and practice, the Hatch Act of 1882 established funding for “experimental farm stations,” which were to be located strategically to replicate actual farming conditions and be more visible to farmers. As the experimental farm stations began to produce potentially useful results, they began to publish in research journals and bulletins. In 1889 the Department of Agriculture began issuing Farmers’ Bulletins and the Yearbook of Agriculture. However, these publications reached a small proportion of farmers, many of whom still distrusted “book farming.” To reach more farmers, the Departments of Agriculture began to offer local “Farmers’ Institutes” throughout the country.

Despite these strategies, farming practice progressed remarkably slowly until, in 1903, a U.S. Department of Agriculture employee, Seaman A. Knapp, conducted an experiment in Terrell, Texas that resulted in a new way of looking at “continuing agricultural education.” He decided that if he could convince one carefully chosen farmer to use evidence-based methods on a portion of his land, the results would convince him of the benefits, and he might then be able to convince other farmers in the same county to try them. When his experiment worked better than he could have imagined, Knapp offered Walter C. Porter, his “early adopter,” a job as “county agricultural extension agent,” and was given funding to hire an additional 32 additional extension agents in counties throughout Texas and into Louisiana. Word spread quickly, and, even as county extension offices were springing up in other states, Congress, passed the Smith-Lever Act in 1914, authorizing the Department of Agriculture to establish a nationwide Agricultural Extension Program. The goal of the program was to maintain meaningful bi-directional communication between the land grant universities and farmers and provide on-site training and assistance to farmers so they could stay abreast of advances in science. By 1920, there were seven thousand federal extension agents, working in nearly every county in the nation, and by 1930 there were more than seven hundred and fifty thousand demonstration farms and farm stations.

The ingredients missing from all prior strategies were person to person academic detailing (Knapp’s instruction of Porter) and implementation assistance provided by a trusted neighbor and colleague (assistance provided by Porter to the other farmers in the county). Key principles were locality and
interpersonal relationships. The results were truly astounding. Productivity increased dramatically and prices fell by 50%, so that by 1930, food comprised just 24% of family spending and 20% of the workforce. Today, food accounts for 8% of household income and involves only 2% of the labor force. Food availability, variety, and safety are taken for granted.

Cooperative Extension receives funding from federal (30%), state (70%) and county (<1%) sources. Funding is of two types, sustainable funding and project-specific funding obtained through competitive grants and contracts. At the time of Rasmussen’s book (1989), staffing was 1% federal, 32% university, and 67% local plus more than 2 million volunteers.

A Brief Summary of Quality Improvement (QI) Research in Oklahoma

In 1999, researchers at the University of Oklahoma Health Sciences Center (OUHSC), in collaboration with clinician members of the Oklahoma Physicians Resource/Research Network, a primary care practice-based research network established 5 years earlier, began a series of studies to determine the best ways to help primary care practices improve their care processes. The earliest studies were funded by the Oklahoma Foundation for Medical Quality and the Oklahoma Healthcare Authority. Subsequent projects have been funded by the U.S. Agency for Healthcare Research and Quality, the National Institutes of Health, and the Robert Wood Johnson Foundation.

One of the first lessons learned was the depth and breadth of practical wisdom that already exists within community practices but is rarely shared across practices. The research team learned how to find these “best practices” by conducting performance audits and focusing on the highest performers. They learned that clinicians are more likely to implement methods found to be successful by their peers than recommendations from journals or other “experts.” But they also found, as others had, that there is still value in academic detailing from a trusted academic expert that includes an overview of the evidence, a review of what high performing practices seem to be doing, a facilitated discussion of current methods, and an agenda for improvement.

The team confirmed that clinicians always think they are doing a better job than they actually are, and so performance feedback is an important motivator for change. Because physicians tend to be competitive people, it also helps to provide data comparing their performance to that of their peers. They learned to repeat the performance evaluations monthly during the change process to give practices a sense of their progress.

Finally, the researchers learned that improving processes of care while continuing to see patients is difficult, that most primary care practices are resource poor, and that even a little assistance during the change process helps a lot. Borrowing the concept of practice facilitation from England and Canada, they began employing practice enhancement assistants (PEAs) who spend ½ day in each practice for periods of about 6 months to help them overcome obstacles to change. The fully evolved QI process then included initial and monthly performance evaluations, identification and clarification of best practices, academic detailing, and practice facilitation. Several cluster randomized trials (randomization by practice) showed that this method was consistently effective. The team has also experimented with local learning collaboratives, monthly noon conferences involving representatives of small numbers of practices working on the same care processes, and this seems to have some additional value.

It was only after the research team became comfortable with this process that they realized several things. First, it was clear that success was dependent upon relationships, including relationships between practices, relationships with the academic detailer, and relationships with the facilitator, and it was clear that relationships took time to build. When working with new practices it often took 2-3 months for the facilitator to bond sufficiently with the clinicians and staff to have any positive impact. Second, the facilitators were spending large amounts of time travelling from Oklahoma City and Tulsa to practices around the state at significant cost. At some point it occurred to the team that what they had “discovered” looked almost identical to what the farming community had figured out 100 years earlier.

Primary Care Extension

The Oklahoma research team and several others around the country began to wonder what “Primary Care Extension” would look like and how it might be funded. Because these conversations began during the drafting of the Affordable Care Act, they were able to bring their ideas to United States Senate staffers working with the Health, Education, Labor, and Pensions (HELP) Committee. The result was Section 5405 of the final bill authorizing the establishment of a “Primary Care Extension Program” that would “provide support and assistance to primary care providers to educate providers about preventive medicine, health promotion, chronic disease management, mental and behavioral health services, and evidence-based and evidence-informed therapies and techniques, in order to enable providers to incorporate such matters into their practices and to improve community health by working with community-based health connectors (referred to in this section as Health Extension Agents).” An article was published in the Journal of the American Medical Association entitled, “A health care cooperative extension service: Transforming primary care and community health” and other similar publications followed in close succession.

Examples of “best practices” began to emerge. The University of New Mexico (UNM) was an early adopter of the health extension idea and had established Health Extension Rural Offices (HEROs) and health extension agents in communities throughout the state whose role was to help communities to identify health resource needs and communicate those to the Office of the Vice President for Community Health. The UNM and New Mexico State University, the state’s land grant college, when possible, identified and supplied the needed resources if available. The focus was not on primary care practices per se, but primary care practices...
were certainly encouraged to be involved. Resources provided by the two Universities have included consultants, trainees, grant writing assistance, bibliographic resources, workforce development, and assistance with program development. In the spirit of Cooperative Extension, they are “taking the University to the people.”

Though focused more on case management than on quality improvement, the North Carolina Community Care Program is also similar to the Health Extension model. In 2004, the Medicaid Program in North Carolina released a request for proposals to establish non-profit networks of primary care clinicians willing to share and direct case management services directed at improving care and reducing costs for patients with chronic health conditions. The Program agreed to provide $2.50 per member per month to the networks and the same amount to clinicians who agreed to participate. Now seven years later, there are 14 networks covering the entire state, each of which includes on its board of directors representatives from public health, mental health, social services, and primary care. Physician advisory committees have considerable input into how the case managers hired by the networks are deployed and the projects they undertake. The result has been millions of dollars in cost savings and much better relationships between primary care clinicians and the Medicaid Program. Because of the success of this initiative, the Oklahoma Health Care Authority applied for and received a waiver from the Centers for Medicare and Medicaid to establish three similar networks, called Health Access Networks in Tulsa and Canadian Counties.

Vermont’s Blueprint for Health is another interesting example of the health extension model. In 2006, the Vermont legislature passed health care reform legislation that included universal health insurance coverage, a delivery system built on a foundation of primary care, establishment of “community health teams,” and an evaluation infrastructure to support ongoing quality improvement. All insurance companies are required to provide financial support for the program, which includes payments to clinicians based upon their ability to meet patient-centered medical home standards and participate in the community health teams. Each community health team includes five full time staff (e.g., case managers, QI facilitators, mental health professionals, etc.) determined by the needs of each community of 20,000 patients. From these examples it was clear that a Primary Care Extension system could be thought of as a piece of a larger vision of health extension.

Responsibility for Section 5405 of the Affordable Care Act (ACA) was assigned to the Agency for Healthcare Research and Quality (AHRQ), but the Senate Appropriations Committee did not appropriate the $120 million suggested to fund the first 10 states. However, AHRQ had become extremely interested in Primary Care Extension as a way to facilitate dissemination and implementation of research products. A request for applications was released for what the Agency decided to call IMPaCT (Infrastructure to Maintain Primary Care Transformation) grants to support development of primary care extension programs in 4 states with dissemination to 12 others. Oklahoma was awarded one of these grants. The two-year project began September 30, 2011.

**Primary Care Extension in Oklahoma**

Based upon an understanding of Oklahoma’s primary health care system and the state of the state’s health, and after conversing with a wide variety of potential stakeholders, the Oklahoma application proposed to establish a statewide network of county health improvement organizations (CHIOs). A county-based organizational structure was chosen because most stakeholder groups are organized by county (e.g., county health departments, county mental health services, county social service agencies, county medical societies, Turning Point coalitions, etc.), counties are about the right size in terms of travel distances, and because Cooperative Extension is organized by county. Obviously, accommodations may need to be made for both sparsely and heavily populated counties.

Because the CHIOs will receive and manage money, they will need to be or have access to fiscal entities, probably 501c3 non-profit, charitable organizations. The current plan is to help existing county coalitions (e.g. Turning Point coalitions) to become non-profit corporations. The Public Health Institute of Oklahoma has agreed to expand their Board of Directors to include representatives from academic departments of primary care and the Oklahoma Health Care Authority in order to satisfy AHRQ’s requirements for a state hub.

The mission of each CHIO will be to improve the health of citizens of that county. An important aspect of that work will be support for quality improvement in primary care practices, the purpose of the statute and the grant. Building upon the work that has already been done by the Department of Health and the 70 Turning Point coalitions, the CHIOs will be involved in periodic and ongoing countywide assessments of health and health care challenges and in strategic planning to address them. It is likely that each CHIO will establish advisory committees or work groups to address the wide variety of health-related issues that will be identified. For example, the primary care extension activities will require advisory committees made up of primary care clinicians, practice staff, and patients.

The four regional Area Health Education Centers (AHECs) will serve as regional QI coordinating centers. CHIOs in each quadrant of the state will be able to reach out to their regional AHEC for access to various resources. These resources could include administrative assistance, identification and arrangements for clinical expertise (e.g. academic detailing), assessment and responses to manpower shortages, research and grant writing assistance, and facilitation of project-specific funding. Some of these will be new roles for the AHECs, but ones that are compatible with their mission and ones they are anxious to assume. They will depend upon existing relationships among the AHECs, the academic institutions, and community clinicians throughout the state.

Funding for health extension is expected to be of two types, long term and project-specific. Long-term, sustainable funding will be the greatest challenge. The most promising sources are the public and private insurance companies. Pennsylvania and Vermont have forged alliances among insurance carriers to fund
primary care improvement initiatives. In North Carolina and Oklahoma, the Medicaid programs have received waivers, allowing them to fund case management and some aspects of primary care quality improvement. If a level playing field can be created, the insurance carriers will likely be willing to support primary care extension. In fact, the ACA provides a potential field-leveling opportunity in the Minimum Loss Ratio provision, which requires that major insurance companies spend 85% of the money they receive in premiums for health care and the improvement of health care services. Since most companies are currently only spending 75% of premiums, new money will be coming into the system. The rules for how that money can be spent are now being written, but many inside of the insurance industry would like to be able to spend some of it to provide greater support to primary care without actually increasing fee-for-service payments. Project-specific funding is already plentiful. The number of organizations willing to invest in improved health and health care is large and increasing, and even more money would be spent if there were more effective ways to distribute and use it to achieve desired results.

In 2005, the Canadian County Coalition for Healthy Families and Children (founded nine years earlier) partnered with several county agencies in an attempt to increase access to health care for children. Ten thousand dollars were identified to begin the effort. This was matched one-to-one through the Medicaid program, making it possible to hire a half-time case manager. Because of that development, the Department of Family and Preventive Medicine at the OUHSC entered into a contract with the Oklahoma Health Care Authority (OkHCA) to provide approximately $50,000 of faculty and staff time matched by an equal amount of funding from Medicaid to pay a practice facilitator to help Canadian County practices increase the rate and quality of well child care visits. As a result of that initiative, the Department of Pediatrics at the OUHSC applied for and received a $100,000 grant from the Commonwealth Fund to help the same practices incorporate developmental and behavioral screening processes. During this time, the involved clinicians began meeting to learn from each other. Now, 6 years later, the Coalition has merged with an existing 501c3, non-profit organization, the El Reno Community Clinic, Inc., and was approved as one of three Health Access Networks by the OKHCA and is receiving approximately $300,000 per year to provide support to primary care practices serving Medicaid patients. In other words, a coalition focused on improving access to primary care services, by joining with county agencies, were able to leverage a $10,000 initial investment to bring $300,000 per year of sustainable funding and $210,000 of project-specific funding and human resources into the county.

Aligning Existing QI Resources
A number of state agencies and organizations are involved in QI activities. The OkHCA contracts for both practice facilitators and case managers who serve patients throughout the state. The Oklahoma Foundation for Medical Quality also employs the equivalent of practice facilitators and conducts a variety of QI activities in primary care practices. The Area Health Education Centers are doing QI with clinicians and practices. All of these activities could be more effective and efficient within a health extension infrastructure.

The professional associations are becoming involved in QI activities. The new Maintenance of Certification standards have increased pressure on these organizations to support QI-like activities. The state’s three major academic medical centers (AMCs) are all involved in continuing medical education (CME) and understand that this will increasingly involve more than just lectures. The University of Oklahoma’s Department of Geriatric Medicine has received funding to expand its QI efforts in order to improve care of the elderly.

Visually every county in Oklahoma is blessed with a significant number of organizations and agencies focused on improving population health and health care services. In most counties, these groups have already begun to work together through Turning Point Coalitions formed from a wide variety of stakeholder groups with support from a grant to the state from the Robert Wood Johnson Foundation and staff from the Oklahoma State Department of Health. Many of these coalitions have already received foundation funding for specific community-wide health improvement projects. However, most have yet to develop into identifiable fiscal entities and most do not have significant primary care clinician involvement.

The proposed extension program can be viewed as the next step in the evolution of PHIO, Turning Point Coalitions, AHECs and AMC CME offices. It is also the next logical step toward breaking down traditional walls separating public health, mental health, and primary care. It will provide a forum within which hospitals can more effectively work with primary care clinicians and with other community stakeholder groups. True collaboration is most likely to occur when there is a shared mission (improving the health of the county) and when all stakeholders are working off of the same budget at least part of the time.

Timeline
A statewide meeting is being planned for February 1, 2012, in Oklahoma City to introduce clinicians and other stakeholders across the state to the concept. Conference attendees will be asked to critique the current blueprints and offer concrete suggestions for improvement. A goal is to have at least 25 functional county health improvement organizations by the end of September of 2012 and another 25 a year later. Their ability to employ administrative staff and facilitators will depend upon the ability of the various partners to align existing resources and on the availability of additional funding.

REFERENCES
3. Aspy CB, Enright M, Halstead L, Mold JW. Improving mammography screening using best practices and practice


In December of 2012, the Extension Committee on Organization and Policy (ECOP) Health Task Force of the Association of Public & Land-Grant Universities was formed to identify Cooperative Extension health program priorities, as well as potential partners for these programs. Based upon the results of this task force, the Association of Public & Land-Grant Universities issued this national framework for health extension.
Cooperative Extension’s National Framework for Health and Wellness

March 2014

Committee Members
Bonnie Braun, Karen Bruns, Linda Cronk, Linda Kirk Fox, Sonja Koukel, Suzanne Le Menestrel, Lily Monroe Lord, Cindy Reeves, Roger Rennekamp, Carol Rice, Michelle Rodgers, Javiette Samuel, Ann Vail, Tamara Warren
Cooperative Extension’s National Framework for Health and Wellness
ECOP Health Task Force

“Lifestyle choices we are making in this new century threaten to undo all the medical advances of the last one.” U. S. Surgeon General David Satcher

We have long known that the primary determinants of an individual’s health status are lifestyle, environment, and genetics. Health care is only responsible for 10 percent of an individual’s overall health. Yet, approximately 90 percent of the national health budget is dedicated to health care.

Meanwhile, individuals and families looking to embark on the road to a healthier life face a myriad of social, economic, and environmental factors that reinforce their current behaviors. As a result, the United States continues to spend more on health care ($8,600 per person) than any other nation but has among the worst health outcomes of any developed nation.

America’s land-grant universities have the knowledge and expertise needed to help address this issue. Through county Extension offices, universities have the community presence and local credibility needed to influence the social, economic, and environmental determinants of health. Evidence-based interventions, deployed in ways that are respectful of community individual and family norms, beliefs, and current practice have been shown to keep people healthy, and delay or prevent the need for medical care.

This year, 2014, marks the 100th anniversary of the signing of the Smith-Lever Act which created the Nation’s Cooperative Extension System. This “Extension” model arose at a time when American agriculture was largely inefficient and only marginally productive. The consequences of the agricultural practices of the time were endangering our Nation’s economic, environmental, and personal health. A century later, American agriculture is without equal in its contributing food to a growing world population. We, and others, believe that this same system of Extension can do for the nation’s health what it did for American agriculture.

Given the national trends in health, and the current assets of Extension, including the ability to be responsive to emerging needs, it is a critical time to create a new programmatic focus.
Figure 1.

Cooperative Extension’s National Framework for Health & Wellness

KEY
- Outcome
- Social-Ecological Model
- Extension Priorities
- Partners

Based on the National Prevention Strategy Action Plan, U.S. Department of Health & Human Services
Cooperative Extension’s National Framework for Health and Wellness

In December, 2012, the ECOP Health Task Force was established and charged by 2013 ECOP Chairman, Daryl Buchholz, to complete three goals over the course of calendar year 2013:

I. Identify priorities for Cooperative Extension health programs for the next 3-5 years.
II. Identify outcome indicators for each priority; and
III. Identify potential partners, public and private, including non-traditional partners, to be engaged in resource development, program implementation, and outcomes reporting.

Development of the Model Framework

After considerable review of health priorities, both internal and external to Cooperative Extension, the Task Force determined that it was essential to align Cooperative Extension’s national framework for health and wellness with the U.S. Department of Health & Human Services’ National Prevention Strategy: Strategic Directions. By aligning Cooperative Extension with the National Prevention Strategy, we accomplish a mutually beneficial engagement of both public and private partners and a national strategic direction that can both increase awareness of the value of prevention across multiple sectors and further support a comprehensive approach to preventing illness and disease by promoting health and wellness. Therefore, in direct alignment with the National Prevention Council model, the overall goal for the Cooperative Extension health and wellness framework is to, “Increase the number of Americans who are healthy at every stage of life.” (Figure 1.)

The U.S. Department of Health & Human Services National Prevention Strategy identifies four strategic directions for all prevention efforts:

1) Healthy and Safe Community Environments;
2) Clinical and Community Preventative Services;
3) Empowered People; and
4) Elimination of Health Disparities.

These four directions work towards the improvement of overall health and wellness for the U.S. population and include recommendations that are needed to develop a prevention-oriented society. (U.S. Health and Human Services, 2012).

Additionally, the Cooperative Extension framework utilizes the Social-Ecological model (Bronfenbrenner) as its theoretical base. This model considers the complex interplay between individual, community, and societal factors. The factors recognize an individual’s attitudes, beliefs, behaviors and choices. The community and societal factors include both the settings in which people
live and work, as well as the social and cultural norms such as economics, educational and social policies and inequalities. We recognize the Social-Ecological aspect in the next ring of our model framework on health as including “healthy and safe choices” and “healthy and safe environments,” and the interplay between these factors. (Figure 1.)

Assessment of National Trends

As the Task Force worked to narrow down the priorities found in the third ring of the model framework (Figure 1.), we identified a number of national trends that informed the decision-making process around the selection of priorities for health for Cooperative Extension nationally. A brief summary of these trends follows:

A. Public Health Policy Shifts

- There has been a movement from dependence on health care providers to personal and family care-giving and community-based resources; increased access to health care has been occurring through access to health insurance.
  - From 1999 to 2010 the percent of people who have failed to acquire medical care because of cost increased; from 4.3% to 6.9% (Centers for Disease Control and Prevention/ National Center for Health Statistics, National Health Interview Survey).
  - Over the same 10-year period, there has been an increase in the proportion of health centers that have been nationally documented as Patient Centered Medical Homes from 1% to 25%. (U. S. Department of Health and Human Services, HHS Strategic Plan Appendix B-2: Performance Measures (Detail Report)).
  - The development of new health centers, new satellite sites, and the greater capacity at current health centers has increased the number of patients served. Health centers attended to 19.5 million patients in FY 2010, which is 0.7 million more than in FY 2009 (18.8 million) and 2.4 million more than the 17.1 million served in FY 2008 (U. S. Department of Health and Human Services, HHS Strategic Plan Appendix B-2: Performance Measures (Detail Report)).

- Implementation of the Affordable Care Act is currently changing the U.S. health care environment.
  - In the 2011 National Health Interview Survey, the percentage of reported uninsured was 17.3% (45.9 million) for persons under age 65; 21.3% (40.7 million) for 18–64 year olds; and 7.0% (5.2 million) for children under age 18.
Health insurance marketplaces are a critical component of the Affordable Care Act. The FY 2015 target is for 93% of legal residents to have insurance coverage. (U. S. Department of Health and Human Services, HHS Strategic Plan Appendix B-2: Performance Measures (Detail Report)).

The Affordable Care Act identifies community-based health connectors as ‘Health Extension Agents.’ The term ‘Health Extension Agent’ means any local, community-based health worker who facilitates and provides assistance to primary care practices by implementing quality improvement or system redesign, incorporating the principles of the patient-centered medical home to provide high-quality, effective, efficient, and safe primary care and to provide guidance to patients in culturally and linguistically appropriate ways, and linking practices to diverse health system resources (ACA Title V Subtitle E Section 5405).

B. Health Conditions

- There has been a shift from acute and infectious disease to chronic and non-communicable diseases.
  - Chronic health conditions have serious consequences for disease, premature death, and health care costs. Nearly half (45%) of American adults report that they live with one or more chronic health conditions. From 2002 to 2009, the age-adjusted percentage with two or more chronic conditions increased from 12.7% to 14.7% (P < .001), and the number of adults with two or more conditions increased from approximately 23.4 million to 30.9 million. (Ford, Croft, Posner, Goodman, & Giles, 2013).

- Food insecurity impacts health. Food insecurity hovers around 15% with very low food security increasing.
  - In 2012, approximately 14.5% of American households had low food security; 5.7% of households had very low food security—this was basically unchanged from the 2011 percentage. There were 10% of households, or 3.9 million, with children reported to be food insecure (Coleman-Jensen, Nord, & Singh, 2013).

- There is an increase in age-related health challenges.
  - Nearly 33% of men and women’s lifetime expenditures for healthcare are spent during middle age; approximately 50% of their total lifetime spending for healthcare is during the senior years (Aleayehu & Warner, 2004).

- Translational research is increasingly emphasized by the National Institutes for Health.
Since its creation in 2006, the NIH Clinical and Translational Science Awards Program has grown from 12 sites to 61 sites located at academic health centers and various institutions across the U.S. The National Center for Advancing Translational Sciences understands that community engagement is a significant factor in all phases of clinical and translational research and necessary to bring innovative and improved treatments to patients across the Nation. (Institutes of Medicine, 2013). http://www.iom.edu/Reports/2013/The-CTSA-Program-at-NIH-Opportunities-for-Advancing-Clinical-and-Translational-Research.aspx

C. Health Disparities

- According to a 2009 study by the Joint Center for Political and Economic Studies, eliminating health disparities for minorities would have lowered direct medical care expenditures by $229.4 billion and reduced indirect costs associated with illness and premature death by approximately $1 trillion during 2003–2006. (http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a2.htm?s_cid=su6203a2_e)
- The leading health indicators have demonstrated little improvement in disparities over the past decade (Healthy People, 2010). Significant racial and ethnic health disparities continue to permeate the major dimensions of health care, the health-care workforce, population health, and data collection and research.
- Health disparities, differences in health outcomes, arise from genetic, biological, and social factors affecting individuals across their lifespans. Social determinants of health are the conditions in which people are born, grow, live, work and age that can contribute to or detract from the health of individuals and communities. Marked difference in social determinants, such as poverty, low social-economic status, poor educational attainment, and lack of access to care, often exist along racial and ethnic lines.
- Individuals, families and communities that have systematically experienced social and economic disadvantages face greater obstacles to optimal health.
- Suboptimal health care quality and access exists, especially for minority and low-income groups. Overall quality is improving, but access is getting worse and disparities are not changing. (National Healthcare Disparities Report, 2012).
- Fundamental to reducing health disparities is a comprehensive intentional effort to advance health equity and provide people with tools and information to make healthy choices.
D. Economic Situation

- The Current Population Survey data show that 15 percent of Americans, 46.5 million people, live at or below the government-defined poverty line (DeNavas-Walt, Proctor, & Smith, 2013). Twenty-two percent of all children under age 18 (16 million) live in families with incomes below the federal poverty level (Addy, Engelhardt, & Skinner, 2013).
- The U.S. has experienced a significant rise in the costs of health care. In 2007, health care costs accounted for 16 percent of the U.S. Gross Domestic Product (Centers for Disease Control and Prevention, 2013). These costs are passed on to insurance companies and patients.
- Nearly half of bankruptcies are attributed to major medical reasons (Himmelstein, Warren, Thorne, & Woolhandler, 2005). Medical reasons include illness and injury, uncovered medical bills and a lapse in health insurance coverage.
- There has been a decline in government funding for education. A recent report by the Center on Budget and Policy Priorities noted that states are providing less per-student funding for kindergarten through twelfth grade than they were six years ago (Leachman & Mai, 2013). About one-third of states started the 2013-14 school year with less funding for schools than a year ago (Leachman & Mai, 2013).
- Economic inequalities also contribute to health disparities. A recent Gallup well-being study found that those living in poverty in the United States are more likely to face chronic health problems including depression (Brown, 2012). The National Center for Children in Poverty at Columbia University found disparities between poor and non-poor children in five domains of health, including environmental health, health insurance coverage, access to health care, health outcomes and behavior (Seith & Isakson, 2011), although they note that the relationship between poverty and poor health is a reciprocal one.

E. Population Changes

- The U.S. population is rapidly aging. The last cohort of baby boomers turns 50 in 2014. Between 2000 and 2010, the U.S. population under age 18 grew at a rate of 2.6 percent, whereas the older population (ages 45 to 64) grew at a rate of 31.5 percent. The population aged 65 and older grew at a rate of 15.1 percent (Howden & Meyer, 2011).
- The U.S. Hispanic population grew rapidly in the past 10 years. The U.S. Census defines Hispanic or Latino as “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” Between 2000 and 2010, the Hispanic or Latino population increased by 43 percent (Ennis, Rios-Vargas, & Albert, 2011).
- There is an increased diversity of immigrants with varying cultural experiences related to health matters. Pitkin Derose and her colleagues (2007) found that immigrants, overall, have lower rates of health insurance, use less health care, and experience a poorer quality of health care, though these experiences vary by a number of factors such as English proficiency, social-
economic status, and immigrant status. Immigrant eligibility for federal and state health benefits varies by state and depends on a number of different complex factors (Perreira et al., 2012).

**F. Technology**

- Electronic medical records are becoming the norm. The National Center for Health Statistics (NCHS) examined trends in the use of electronic health record systems among office-based physicians between 2001 and 2012. The use of electronic health record systems increased from 18 percent in 2001 to 72 percent in 2012. The percentage of physicians with an electronic health record system that met criteria for a basic system nearly doubled between 2009 and 2012. Passage of the 2009 Health Information Technology for Economic and Clinical Health Act provided incentive payments through Medicare and Medicaid to increase use of electronic health record systems (Hsiao & Hing, 2012).

- Use of electronic sources of health information has increased. For example, data from the National Cancer Institute’s 2008 Health Information National Trends Survey (HINTS) indicate that of the 40 percent of the U.S. population that searched for cancer information, the two most frequently used sources of information were the Internet (55.3%) and health care providers (24.9%) (National Cancer Institute, 2010). Seventy-two percent of adult Internet users looked on-line for health information in 2012 (Fox, 2013).

- According to a study by the Pew Internet and American Life Project (Fox, 2011), adults use social networking sites to follow friends’ health experiences (23% of social network site users and 11% of all adults) and obtain health information (15% of social network site users and 7% of all adults). Smaller percentages of social network site users are using the sites to raise money for a health-related issue (14%), post comments about health-related issues (11%) and start or join a health-related group on a social networking site (9%).

**G. Health Literacy**

- Only 12% of U.S. adults tested in the National Assessment of Adult Literacy are fully health literate; the majority is at or below basic levels of functioning.
  - The National Assessment of Adult Literacy, which works to monitor and measure health literacy, found that 36% of U.S. adults have limited health literacy: 22% (47 million) of respondents had basic health literacy and 14% (30 million) had below-basic health literacy. The survey found that the majority of U.S adults (53%, 114 million) had intermediate health literacy. Only 12% (25 million) of the persons surveyed had proficient health literacy. (Kutner, Greenberg, Jin, & Paulsen, 2006). Nine out of 10 adults have difficulty using everyday health information presented by health care facilities, retail outlets, media, local communities, and other sources (Institute of Medicine, 2004).
• Demands for health literacy are increasing along with the complexity of health- and financially-related issues.
  - The National Association of Insurance Commissioners (NAIC) estimates that the average family spends over $7,000 annually for various insurance coverage. Chronic health care education and financial education have similar educational foundations that entail the management of long-term conditions, avoiding possible problems, handling problems should they develop, and having regular checkups or check-ins about health or financial issues (Tennyson, 2006).
  - When a person does not understand the health information presented or how to self-manage chronic conditions, there is a higher likelihood that an individual will skip essential medical tests. There is a greater likelihood that the individual will visit the emergency room more often. If patients do not understand health information and directions, attempts to improve quality of care and reduce the cost of health care may not be successful. (Nielsen-Bohlman, Panzer & Kindig, 2004).
  - Poor health literacy is frequently associated with poor self-care management, increased use of emergency medical services, frequent hospitalizations, poor health outcomes, and high medical costs. It is estimated that poor health literacy costs the nation from $106 to $238 billion a year.
• Consumers dread making health insurance decisions and lack confidence in their decisions.
  - The ability to confidently apply knowledge gained is one indication that an individual understands a concept. When an individual self-reports that he or she is "not at all" confident or "not really" confident about insurance decisions, they have significantly lower average scores on the insurance quiz than other respondents ($t = 2.403, p = 0.0168$) indicating a relationship between knowledge of insurance and confidence in making the right insurance decision (Tennyson, 2011).

**Cooperative Extension Strategic Analysis**

A strategic analysis of Cooperative Extension strengths and limitations further informs recommendations for consideration by ECOP.

**Assets**

Cooperative Extension provides:

• A reputation developed over decades for strength in health and nutrition education with well-documented outcomes;
• 4-H youth development program that has included Health, the 4th “H” of 4-H since 1911;
• A nationally recognized 4-H Healthy Living mission mandate;
• Access to a trusted source of information and advice that develops into long-lasting skills and knowledge;
• Through the land-grant university system, a national network of access to expertise and knowledge in agriculture and food systems, and health and human health sciences;
• A venue and links to experts who can translate science into practice;
• Experience in effectively building partnerships and collaborations;
• Experience in community development and sustainable systems change;
• Skilled facilitation of community engagement and broad inclusion of many;
• Commitment to recruiting and training a strong volunteer base;
• Commitment to local presence and relevant programming particularly in underserved areas throughout the U.S.;
• A foundation in the U.S. Dept. of Agriculture, with strong linkages to other federal agencies effectively influencing positive health outcomes.

Limitations

Cooperative Extension is limited by:

• Lack of mission mandate, strategic priorities or common evaluation measures identified in adult health;
• Incomplete/inconsistent multidisciplinary approach to motivating and documenting behavior change;
• Incomplete/inconsistent multidisciplinary approach to addressing systemic social determinants of health;
• Inability to provide a system-wide approach and focused leadership to strengthen Cooperative Extension’s capacity to address national health issues;
• Limited recognition by health care professionals of Extension as a vital partner;
• Few program and evaluation models that capture social-ecological theory;
• Only some engagement as a reciprocal and mutually beneficially partner of co-creation with clientele and community-based organizations, depending upon individual state focus;
• Underdeveloped linkages with colleges and schools of health sciences;
• Staff expertise/capacity:
  ▪ Undocumented capacity relative to expertise in the discipline of health sciences, likely due to limited staffing;
  ▪ Limited understanding of viewpoint/perspectives of physicians, nurses, clinical and public health professionals;
  ▪ In the majority of states, limited integration of programming partnerships with health care professionals and organizations;
Limited opportunities for support of strategic projects with an interdisciplinary partnership of agriculture and health;

Limited capacity to be successful in the interdisciplinary competitive grants environment addressing health;

Lack of agreement among county, state, and federal funding partners and the universities as to Cooperative Extension’s role in health and health care system changes.

I. Program Priorities for Cooperative Extension Health Programs for the Next 3-5 Years

The six Strategic Program Priorities, found in the next outer ring of the model framework (Figure 1) were developed following a review of trends and analysis of Cooperative Extension’s assets and limitations relative to health programming:

1. Integrated Nutrition, Health, Environment, and Agricultural Systems - Improving the health of the Nation requires working across systems. For example, efforts to promote healthy eating are not likely to be successful without considering the process by which food is produced, distributed, and marketed. Likewise, both agricultural systems and health systems are influenced by the built and natural environments in which they exist. Land-grant universities have a unique capacity to support projects that span the boundaries of what some have viewed as closed and separate systems. We must facilitate intentional work across systems that yield higher-ordered wins for all parties.

2. Health Literacy - Health literacy can be defined as the ability to obtain, understand, and act on health information and services. For some, health information is readily available. But deciding what data sources to trust can be difficult, particularly when presented with conflicting recommendations. For others, the challenge is obtaining information in a form that they can understand. Having access to clear, easy-to-understand information is key to making good health decisions. The consequences of acting on bad information can be costly and even fatal. Health literacy is the result of interactions between individuals and systems. It includes the domains of fundamental, scientific, civic and cultural literacy. Increase health literacy will help improve both the health of individuals and the collective public health.

3. Health Insurance Literacy - The Affordable Care Act of 2010 gives individuals more options and more control over their health insurance. It also gives them greater access to preventive services and screenings. With more choice comes responsibility, as well as a need for information that will be of assistance in making decisions about plans and coverage. Health insurance literacy refers to the degree to which individuals have the knowledge, ability, and confidence to find and evaluate information about health plans, select the best plan for their circumstances, and use the plan once enrolled. Extension has a long history of helping limited resource individuals and families obtain the services they need to manage in an increasingly complex world.
4. **Chronic Disease Prevention and Management** - While the nation’s attention is presently focused on the cost and quality of health care and insurance, improvements in population health will require a renewed focus on prevention and staying well. The goals of chronic disease prevention and management are to prevent disease occurrence, delay the onset of disease and disability, lessen the severity of disease, and improve the health-related quality and duration of an individual’s life (adapted from Doll, 1985). Prevention efforts traditionally involve interventions performed before the clinical onset of disease or early in the course of disease, while management efforts may occur later in the disease course and are often focused on reducing the undesired consequences of diseases (adapted from McKenna and Collins, 2010).

5. **Positive Youth Development for Health** – Organizations utilize positive youth development strategies that are focused on helping young people experience thriving trajectories and achieve key developmental outcomes. The ultimate goal is a successful transition to adulthood marked by health and wellbeing, economic stability, social success, and civic engagement. Research shows that positive youth development approaches work, producing young people who are physically, socially, emotionally, and spiritually healthy as well as free of problem behaviors such as a sedentary lifestyle, substance abuse, eating disorders, early sexual activity, bullying, and suicide.

6. **Health Policy Issues Education** – Improving population health will require collective resolve and action to address the social, economic, and environmental determinants of health. For Extension, it will also mean working in new ways to inform decisions about policy. It means working at the outer rings of a socio-ecological model, shaping the context in which people grow, learn, work, and play. Through health policy issues education, we inform and assist individuals and groups as they struggle to make decisions about the health issues that affect them and their communities.

### II. Identify Outcome Indicators for Each Priority

As part of its process, the ECOP Health Task Force determined that this charge would be more appropriate for the Extension system to participate in developing. To this end, the Task Force has developed this model framework and identified the six priority areas, in order to provide a context for the further discussion and development of indicators for each of these priorities. The Task Force has developed a logic model based on the framework to guide the development of indicators for each priority (Figure 2.) Furthermore, the recommendations section provides a process to engage the system in determining indicators and a process for implementation.
III. Identify Potential Public and Private Partners, Including Non-traditional Partners, to be Engaged in Resource Development, Program Implementation, and Outcomes Reporting

Cooperative Extension alone cannot accomplish the overall goal of the model framework to increase the number of Americans who are healthy at every stage of life, without continuing some pre-existing partnerships as well as adding new partners from both the private and public sector. The Task Force recognized Extension will also need to change ways of interacting with partners to address the extensive and complex nature of health. Extension may need to not only change partners but also how Extension partners with others. Partners identified as critical to the overall achievement of the goal as illustrated in the outermost ring of the model framework include (Figure 1.):

- An engaged University System
- Health Professionals
IV. ECOP Health Task Force Recommendations Around ECOP Core Themes

The ECOP Core Themes serve as the guiding principles for the ECOP Health Task Force Recommendations. These recommendations interrelate and build upon each other for a comprehensive pathway to strengthening Extension’s impact upon the health of Americans.

A. Core Theme: Strengthen Organizational Functioning

The following action provides direction and leadership to advance a national agenda for stronger organizational functioning in this area.

1. Establish a Health Implementation Team as a function of the ECOP Program Subcommittee.

*Purpose:* A 5-year ECOP standing committee to address the four ECOP Core Themes relative to the six Health Priority areas for Cooperative Extension.

*Leadership of Implementation Team - ECOP*

**Timeframe:** Establish in 2014, officially begin January 2015 to function through 2020

**Implementation Team Membership:** CES Directors who are not serving on ECOP could be identified as Champions for Health representing each region; six faculty/educators who are representative of land-grant universities staff resources and who can provide programmatic leadership in one of the six priority areas; two to three ECOP Program Subcommittee members identified to serve on the implementation team on a rotating basis; USDA National Institute of Food and Agriculture (NIFA) liaison representation; and Board on Human Sciences (BOHS) and Academic Heads Section (AHS) nominated representatives.

*Who is Responsible:* ECOP Executive Committee will work with regional Executive Directors/Administrators to recommend Director Champions and land-grant university representatives for each strategic area giving consideration to representation from across the country.

*Time Frame:* 2014
B. **Core Theme: Enhance Leadership and Professional Development**

The level of leadership and professional development varies in states related to health. A core group of individuals within states is needed to coordinate and provide leadership in health programming and to lead efforts to enhance the professional development of staff in states. The following actions will enhance the level of leadership and professional development.

1. **Expand personnel addressing health by establishing newly funded Health Extension positions in as many states as possible, phased in over the next 3 to 5 years.**

   *Purpose:* To provide long-term sustainable leadership and content expertise in each state for implementing the Framework and basic resources to build each state’s capacity to conduct health education and outreach.

   *Funding:* External source from a 5-year competitive grant to provide 50% of funding for the positions, matched by 50% from participating states.

   *Who is Responsible:* ECOP Health Implementation Team members (see D. below), National 4-H Council and/or other potential funders.

   *Time Frame:* 2014. Identify potential funding sources and obtain funding to be available for establishment of positions, to be phased in from 2015 through 2020.

2. **Coordinate with and capitalize on the existence of two current committees supporting the work of NIFA in these program topic areas, the National 4-H Healthy Living Management Team and the Nutrition and Health Committee for Planning and Guidance.** Committee membership would be open to these 50+ new positions to encourage their participation. Since both of the committees are composed mostly of the State Specialists in these topic areas, these committees could be approached to help operationalize this recommendation, e.g. by assisting in the planning for the National Health Outreach Conference(formerly Priester Conference), and by assisting in identifying candidates to serve on the ECOP Health Implementation Team. NIFA NPL’s would continue to provide liaison and program leadership to the State Specialists, including these additional 50+ new positions, throughout the country in these topic areas.

   *Funding:* Already existing

   *Who is Responsible:* ECOP Health Implementation Team in coordination with USDA NIFA Program leadership as liaisons to existing program committees.

   *Time Frame:* 2014 - 2020

3. **Provide leadership and support for training and meetings on the health strategic priorities.**
   a. This should be done in partnership with the Cooperative Extension System.
   b. Training and meetings should include:
1. National health training, meetings and webinars with a focus on providing basic and advanced training to our state and county faculty to build their skills in health.

2. Sessions should be taught by experts in community and public health and evaluation of health interventions.

3. Emphasis should be on identifying internal and external sources of expertise to present high-quality training sessions via webinar or other technology-based systems.

Who is Responsible: ECOP Health Implementation Team in coordination with NIFA, as appropriate.

Time Frame: 2014 and on going

4. Enhance leadership understanding of the core components of health programming by conducting a Health Summit Leadership Conference in 2014.

When: Pre-Joint Committees on Organization and Policies July 2014

Purpose: Engage COPs leadership in advancing the vision of the framework. Sample Topics: Why Extension should be involved in Health Promotion and Prevention, Social- Ecological model; examples of best practices, care to prevention, community based, integrated extension research and academic programs, move from programmatic silos.

Outcome: Directors identify team members to come to the National Health Outreach Conference in Georgia in 2015.

Who is responsible: ECOP Health Task Force

Time Frame: 2014

5. To provide an outstanding professional development opportunity for internal and external audiences; implement a National Health Outreach Conference. Formerly, the “Jeanne C. Priester” National Health Extension Conference, in which the “Priester” name will be retained and utilized for a keynote address, or some targeted aspect of the conference for ongoing memorial tribute, but rename the actual conference for the purpose of greater integration of health stakeholders and current cultural change.

Time Frame: Annually/Biannually as needed

May 2015: University of Georgia, hosting

Who is Responsible: Planning Committee-Implementation team and host state.

2015 Program Plan: Focus on the Six Priorities of the Framework as program tracks: Solicit best practices from educators/specialists in each track based on the following criteria: evidence based,
theory based, social-ecological model, and scalable to national level with external speakers on each track.

Participants: Joint COPs, state leadership, health education practitioners internal and external to extension.

2016: Virginia Tech, hosting. 2016 Program Plan to be determined.

C. **Core Theme: Increase Strategic Marketing and Communications**

Internal and external marketing of Extension’s commitment to health programming is needed to advance our efforts and magnify potential impact.

1. **Expand awareness of Extension’s Health programming.**

   Work with eXtension staff to develop a marketing strategy for Extension’s Health Program strategies and implement through eXtension and state communications offices.

   **Who is responsible:** ECOP Health Task Force

   **Time Frame:** June to December 2014.

2. **Enhance communication among Extension employees working on health related strategies and focus areas.**

   Work with eXtension leadership to identify, enhance and build existing Community of Practice, and current resources on eXtension related to health. Develop and implement a plan with eXtension leadership to enhance and build that network that will expand the marketing and communication related to health programming.

   **Who is responsible:** ECOP Health Implementation Team and eXtension leadership

   **Time Frame:** 2014

D. **Core Theme: Build Partnerships and Acquire Resources for Extension’s Framework for Health**

   Central to the success of Extension’s impact on Americans’ health are partnerships and securing adequate resources to support the enhanced infrastructure and capacity needed to expand Extension’s existing health programming. To do this, the following actions need to occur.

A. **Partnerships:** Extension’s strength is skill, knowledge and commitment to partnerships that enable a strong ability to meet the needs of Americans. Our health partnerships need to focus in two areas:

   a. Internal University Partnerships - Establish and/or strengthen relationships within land-grant universities to foster interdisciplinary and collaborative research, teaching and
engagement. Targeted efforts should be made to build the relationships between Extension and agricultural colleges and other university colleges and departments committed to human health. These include, but are not limited to Human Development/Human Ecology, Public Health, Health Sciences, Psychology, Sociology, Public Policy, Law and Life Sciences to foster interdisciplinary and collaborative health programs.

Who is responsible: ECOP Health Implementation Team

Time Frame: On-going

b. Community-based Partnerships - Establish and/or strengthen relationships between Extension and state health departments, federally qualified health centers, health plans, local health care providers and health-related private and public organizations. As the health care, food, and insurance industries adapt to a rapidly changing landscape, they are placing a greater emphasis on keeping Americans healthy. Land-grant universities and the Cooperative Extension System have the expertise and community presence needed by these industries to implement the community-based prevention strategies that improve health and delay or prevent the onset of chronic disease. Extension must engage in conversations with business and industry with the goal of establishing mutually beneficial public-private partnerships that bring financial resources to land-grant universities to support health Extension work.

Who is responsible: State and County Cooperative Extension leadership

Time Frame: On-going

B. Develop and Expand Funding Resources: Extension needs to provide focused efforts to develop new funding streams to support new health-related programming.

a. Develop Policy and Legislative Committee understanding of ECOP Health Task Force priorities.

 Presentation of the six priorities on ECOP leadership and appropriate committees they designate.

 Policy and Legislative Committee propose the health agenda for the Board on Agriculture Assembly.

Who is responsible: ECOP Health Implementation Team and ECOP

Time Frame: 2014

b. NIFA support for a system-wide agenda on health priorities

 It is recommended that ECOP facilitate a dialogue with NIFA leadership to suggest strategies to enhance funding and program support, such as:
1. Reallocating some existing NIFA capacity and/or competitive funds to support mission-related human health priorities.

2. Promoting alignment of NIFA program goals with the ECOP Model Health Framework and the ESCOP Science Road Map, Grand Challenge #5: Improve Human Health, Nutrition and Wellness in the Population, by developing a program goal within NIFA related to human health.

3. Establishing collaboration and coordination between the work of the ECOP Health Implementation Team and the existing Nutrition and Health Committee for Policy and Planning, and the National 4-H Healthy Living management team, and/or develop a new, health-focused guidance committee, related to the potential NIFA program goal in health, the ECOP Model Health Framework, and the ESCOP Science Road Map. This committee may also include representatives from critical health partners within the Department of Health and Human Service (DHHS) agencies such as National Institutes for Health (NIH), Centers for Disease Control (CDC) and Office of Disease Prevention and Health Promotion (ODPHP).

Who is responsible: ECOP Health Implementation Team

Time Frame: by fall 2014

C. Work with the National 4-H Council, university or 4-H foundations or other potential funders to identify and secure partners to help fund Health Extension positions in each state.

- ECOP should identify a task force of Cooperative Extension leaders charged with working with the National 4-H Council (and/or others as identified) to develop a funding strategy.
- Key leaders and Cooperative Extension Leaders should be identified to proactively pursue funding.
- Funding goals should be identified with a strategy for achievement. This should include short term funding goals (18 months) and long term (5 years).

Who is responsible: ECOP

Time Frame: June 2014 to ongoing.
References:


Centers for Disease Control and Prevention (2013). Rising health care costs are unsustainable. Atlanta, GA: Author.


http://www.findyouthinfo.gov/youth-topics/positive-youth-development


http://www.hhs.gov/secretary/about/appendixb2.html

Summit Attendees
**HEALTHY SC: FULFILLING CLEMSON’S LAND-GRA NT MISSION ATTENDEES**

**Care Coordination Institute**

Markle, Nancy, RN  
Vice President of Clinical Operations  
NMarkle@ccihealth.org

**Clemson University**

Allison, David, FAIA, FACHA  
Alumni Professor in the School of Architecture  
adavid@clemson.edu

Barrett, David E., PhD  
Associate Dean for Research of the School of Education  
bdavid@clemson.edu

Berrier, Amanda  
Grants Administrator I - Sponsored Programs  
Adberri@clemson.edu

Britton, J.J., MD  
Trustee Emeritus  
c/o Rose Ellen Davis-Gross REGROSS@clemson.edu

Cason, Katherine, PhD, RD, LD  
Professor of FNPS and State EFNEP Coordinator  
kcason@clemson.edu

Chen, Liwei, PhD, MD  
Assistant Professor of Public Health Sciences  
liweic@clemson.edu

Condrasky, Margaret D., EdD  
Associate Professor of Food, Nutrition, and Packaging Science  
mcondra@clemson.edu

Crandall, Lee, PhD  
Professor of Public Health Sciences  
lac@clemson.edu

Dant, Donna Incropera, M.Ed.  
Senior Director of Development  
ddant@clemson.edu
Dye, Cheryl, PhD
Professor of Public Health Sciences
tcheryl@clemson.edu

Eggert, Julia, PhD, RN
Professor of School of Nursing
jaegger@clemson.edu

Evatt, Janet
Program Coordinator, School of Health Research
jevatt@clemson.edu

Fredendall, Lawrence, PhD
Professor of Management
flawren@clemson.edu

Furman, Shari
Center for Research on Health Disparities
sharif@g.clemson.edu

Gimbel, Ronald, PhD
Department Chair/Head of Public Health Sciences
rgimbel@clemson.edu

Granberg, Ellen, PhD
Associate Provost and Vice President of Academic Affairs
granber@clemson.edu

Griffin, Sarah, PhD
Associate Professor of Public Health Sciences
SGRIFFI@clemson.edu

Hayley-Zitlin, Vivian, PhD, RDN, LD
Associate Professor of Food, Nutrition, and Packaging
VIVIANH@clemson.edu

Headley, Kathy, EdD
Senior Associate Dean of the Division of Collaborative Academic Services for College of Health, Education and Human Development, and School of Education
ksn1177@clemson.edu

Holder, Sharon, PhD
Research Assistant Professor of Public Health Sciences
holder4@clemson.edu

Hu, Qingwei
Public Health Sciences
qingweh@g.clemson.edu
Jones, Karyn Ogata, PhD  
Associate Professor of Communications Studies  
karynj@clemson.edu

Jones, Robert H., PhD  
Provost and Executive Vice President of Academic Affairs  
provost@clemson.edu

Joseph, Anjali, PhD, EDAC  
Endowed Chair in the School of Architecture  
anjalij@clemson.edu

Karanfil, Tanju, PhD  
Associate Dean of Engineering and Science  
tkaranf@clemson.edu

Kemper, Karen, PhD  
Associate Professor of Public Health Sciences  
kkaren@clemson.edu

Kennedy, Frances, PhD  
Associate Provost of the Office of Academic Affairs  
fkenned@clemson.edu

Khan, Tarana, PhD  
Coordinator-EFNEP  
taranak@clemson.edu

Kieve, Melanie  
Public Information Director I - College of Health, Education and Human Development Support Services  
mkieve@clemson.edu

Lawson, Kristen N., MLIS  
Director of the Learning Resource Center, College of HEHD  
kmlawso@clemson.edu

Mayo, Rachel, PhD  
Professor of Public Health Sciences  
RMAYO@clemson.edu

McKendry, Jean, PhD  
Associate Academic Program Director - Center for Research and Collaborative Activity  
jmckend@clemson.edu

Merrill, Molly  
Director of Development  
mdmerri@clemson.edu
Meyer, Kathleen, MEd
Senior Lecturer of Public Health Sciences
kathm@clemson.edu

Miller, Scott
Public Information Director I - PSA Media Relations
srm4@clemson.edu

Oropesa, Salvador, PhD
Department Chair/Head of Languages
oropesa@clemson.edu

O’Rourke, Brian, M.Ed.
Associate Vice President of Development
orourke@clemson.edu

Owens, Margaret
Senior Director of Development for the College of Agriculture, Forestry, and Life Sciences and Public Service Activities
mr6@clemson.edu

Padua, Mary G., PhD
Department Chair/Head of Landscape Architecture
mgpadua@clemson.edu

Pan, Xi, PhD
Post-Doctoral Fellow in Public Health Sciences
xip@g.clemson.edu

Parker, Veronica, PhD
Alumni Distinguished Professor of the School of Nursing
veronic@clemson.edu

Penland, Missy Ryan
Senior Director of University Development
ryan2@clemson.edu

Rhodehamel, E. Jeffrey, PhD
Department Chair/Head of Food, Nutrition, and Packaging
jrhode@clemson.edu

Robinson, Marian, BA, CHE
TCAT Director/Program Coordinator, Youth Development
mchpmn@clemson.edu

Rodriguez, Jorge, PhD
Research Assistant Professor of Bioengineering
jorger@clemson.edu
Schalkoff, Chrissie
Research Assistant, CU/GHS Research Collaboration
cschalk@g.clemson.edu

Scott, Amanda McDougald,
Institute on Family and Neighborhood Life
ammcdou@g.clemson.edu

Sherrill, Windsor Westbrook, PhD
Associate Vice President for Health Research, Clemson University
Chief Science Officer, Greenville Health System
wsherri@clemson.edu and wsherrill2@ghs.org

Shi, Lu, PhD
Assistant Professor of Public Health Sciences
lus@clemson.edu

Sianko, Natallia, PhD
Assistant Professor of Youth, Family, and Communication Studies
natalls@clemson.edu

Small, Mark, JD, PhD
Professor and Associate Director of the Institute on Family and Neighborhood Life
msmall@clemson.edu

Smith, Katie
Stewardship Events and Engagement Manager
katiehc@clemson.edu

Smith, Kerry, PhD
Professor of Genetics and Biochemistry
kssmith@clemson.edu

Spencer, James, PhD
Associate Dean for Research, College of Architecture, Arts, and Humanities
jhspenc@clemson.edu

Spitler, Hugh, PhD
Professor of Public Health Sciences
hspitle@clemson.edu

Stein, Devon
Director of Foundation Relations
dastein@clemson.edu

Summey, Julie
Public Health Sciences
summey2@g.clemson.edu
Taaffe, Kevin, PhD
Associate Professor of Industrial Engineering
taffe@clemson.edu

Timmons, Shirley, BSN, MN, PhD
Associate Professor of the School of Nursing
STIMMON@clemson.edu

Ulosevich, Pam
Administrative Assistant in the College of Health, Education and Human Development
pamelau@clemson.edu

Watt, Paula, PhD, FNP-BC
Director, Joseph F. Sullivan Center
pwatt@clemson.edu

Wetsel, Margaret (Ann), PhD, RN
Associate Professor of the School of Nursing
mwetsel@clemson.edu

Williams, Joel E., PhD, MPH
Associate Professor of Public Health Sciences
joel2@clemson.edu

Woodard, Kathy
PSA Director of Planning and Research, Office of Economic Development
ckathy@clemson.edu

Wright, Brett, PhD
Dean of the College of Health, Education and Human Development
wright@clemson.edu

Zhang, Lingling, PhD
Assistant Professor of Public Health Sciences
lingliz@clemson.edu

**Clemson University Cooperative Extension Service**

Ardern, Pamela B., EdD
State 4-H Program Leader
pardern@clemson.edu

Baker, Kimberly, MS, RD, LD
Extension Associate - Anderson
kabaker@clemson.edu

Culler, Will
Extension Associate
wculler@clemson.edu
Dobbins, Thomas R., PhD
Director of Cooperative Extension Service
tdbbns@clemson.edu

Hegler, Marie
Area Food Safety & Nutrition Agent
carol@clemson.edu

Hoover, Adair P.
Program Assistant, Food2Market
cpope@clemson.edu

Northcutt, Julie, PhD
Program Team Leader and Professor Food, Nutrition, and Packaging Science
jknorth@clemson.edu

Parisi, Michelle, PhD, RD
Assistant Program Team Leader, Food Safety and Nutrition
mparisi@clemson.edu

Welch, Kristen D., MS
Senior Extension Agent - Spartanburg
kwelch@clemson.edu

**The Duke Endowment**
Warren, Stacy
Program Officer
swarren@tde.org

**Greenville Health System**
Berrier, Amanda
Grants Administrator I - Sponsored Programs
Aberrier@ghs.org

Ellefson, Anne, JD
Deputy General Counsel for Academic and Community Affairs
AEllefson@ghs.org

Fredendall, Lawrence, PhD
Clemson Director, Institute for Advancement of Health Care
LFredendall@ghs.org

Gilpin, John Witherspoon, MD
Radiologist
JGilpin@ghs.org
Green-Hadden, Joy, DNP, APRN, NPC, FNP
Executive Director of Advanced Practice & Academics
JGreenHadden@ghs.org

Hipp, Candice Springs, MHA
Strategic Project Coordinator
chipp@ghs.org

Isley, Malcolm, MHA
Vice President of Strategic Services
misley@ghs.org

Rogers, Kenneth, MD
Chair of Psychiatry and Behavioral Medicine
KRogers@ghs.org

Rusnak, Gregory J., MHA
Executive Vice President and Chief Operating Officer
GRusnak@ghs.org

Schmidt, William, MD, PhD
Chair of Pediatrics
WSchmidt@ghs.org

Sease, Kerry, MD, MPH
Pediatrician and Medical Director for New Impact
KSease@ghs.org

Sherrill, Windsor Westbrook, PhD
Associate Vice President for Health Research, Clemson University
Chief Science Officer, Greenville Health System
wsherri@clemson.edu and wsherrill2@ghs.org

Sinopoli, Angelo, MD
Vice President of Clinical Integration and Chief Medical Officer
ASinopoli@ghs.org

Snow, Jennifer Z., MBA
Director of Accountable Communities
jsnow@ghs.org

Taylor, Spence, MD
Vice President of Physician Engagement Chief Academic Officer, and President of GHS Clinical University
staylor@ghs.org
Thames, Brenda, EdD
Vice President of Academic and Faculty Affairs
bthames@ghs.org

Williams, C. David III, MD
Chair of Radiology
CWilliams5@ghs.org

Wiper, Donald W. (Chip) III, MD
Chair of Obstetrics and Gynecology
dwiper@ghs.org

Youssef, Cindy, MA
Clinical University Liaison
CYoussef@ghs.org

**Oklahoma Foundation for Medical Research/Oklahoma Shared Clinical and Translational Resource**
Mold, James, MD, MPH
George Lynn Cross Emeritus Research Professor
James-Mold@ouhsc.edu

**Oregon State University**
Bowman, Sally, PhD
Health Extension Administrator, Professor of Social and Behavioral Science
bowmans@oregonstate.edu

**Texas A&M AgriLife Extension Service**
Ballabina, Susan, PhD
Associate Director for Program Development
sg-ballabina@tamu.edu

Gardner, Julie, MEd
Program Specialist in Community Health
j-gardner@tamu.edu

**University of Kentucky**
Henning, Jimmy, PhD
Associate Dean for Extension, Director of Cooperative Extension Services
jimmy.henning@uky.edu

**University of New Mexico Health Sciences Center**
Nkouaga, Carolina
Associate Director of the Office of Community Health
CNkouaga@salud.unm.edu