To Governor Sanford and the General Assembly:

On behalf of The Board of Directors of The Diabetes Initiative of South Carolina, I am pleased to present our Twelfth Annual Report (calendar year 2006). This report was requested in the Diabetes Initiative of South Carolina Act, Chapter 39, Section 44-39.

We have many active programs of patient education. Through our effective, ongoing collaboration with the Diabetes Control Program, SC DHEC, we have established 39 coalitions around the state. These are primarily located in rural areas, and allow interested individuals who are affected by diabetes to share experiences and develop educational programs. In collaboration with the National Library of Medicine, we have established computerized diabetic patient programs in community libraries.

We continue to have a major focus on professional education. Several annual symposia are held around the state which attract over 500 health professionals. Outside grant support is very healthy, and supports programs directed at youths with diabetes, intensive long-term diabetic management, community education and clinical research, and studies on the genetics of diabetes.

We assess progress by regular reviews of epidemiologic data by our Surveillance Council. The most exciting development has been a 35 – 40% drop in the numbers of individuals with diabetes in SC who have been hospitalized for lower extremity amputations in the past few years. There are similar downward trends in hospitalizations for heart attacks and stroke in people with diabetes. We attribute the remarkable results to a multitude of educational programs that have directed attention of diabetic patients to regular foot examinations, guidelines for care, and visits to their health care providers to implement modern preventive management.

In 2006, we launched a new program: Intensive Management of Diabetes in the Hospital. Recent studies have clearly indicated that careful management of blood glucose (with a goal of normalization) will reduce mortality, morbidity, infections, and length of hospital stays for people who are hospitalized with diabetes and complications. There is great interest in this statewide program, and 15 hospitals have indicated that they will participate in this program.

Outside yearly funding of programs of education, care, and clinical research in diabetes now exceeds $9.2 million yearly. This is more than 34 times the current state-appropriated budget of the Diabetes Initiative of South Carolina. We continue to be enthusiastic about the ability of the Diabetes Initiative of SC to combat diabetes and its complications by its innovative programs of community outreach, education, and surveillance. We are grateful to the General Assembly for establishing this Initiative, and sincerely hope that you will find this to be an encouraging report.

John A. Colwell, MD, PhD
Chair, Diabetes Initiative of S.C. Board
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EXECUTIVE SUMMARY
EXECUTIVE SUMMARY

In calendar year 2006, the emphasis on activities of the Diabetes Initiative of South Carolina has been on extensive educational activities for patients and health providers. It is our philosophy that individuals affected by diabetes and its complications must be informed about the many ramifications of this chronic disease to be effective in prevention and care.

Many programs directed at patient education are now operative in our state. Under the leadership of the Diabetes Control Program, SC DHEC, 29 coalitions have been formed throughout South Carolina. These lay groups concentrate on informing people in their regions about diabetes and its complications. There is an Annual African American Day, attended by up to 1000 people affected by diabetes, where multiple aspects of the disorder are presented and discussed. Several major extramurally funded grants (REACH, EXPORT, EXCEED, etc.) focus on imparting information about diabetes to diverse audiences. An innovative program, supported by the National Library of Medicine, has established computerized diabetic patient education in 6 libraries and 5 community sites. Annually, approximately 163 diabetic children and youths with diabetes attend Camp Adam Fisher, where they learn the latest news about diabetes management from their peers and from volunteer health professionals.

Professional education is a major focus. The Diabetes Initiative of SC conducts a 2 day diabetes symposium which is attended by close to 300 health professionals. Additionally, diabetes educational conferences are conducted annually by the DSC USC site and by the Diabetes Control Program, SC DHEC. In the past year, presentations have been made to the American Diabetes Association’s Annual Scientific Meeting, documenting the impressive 40% fall in hospitalizations for amputations in people with diabetes – around the entire state, as well as in Charleston and Georgetown counties, as a result of the REACH program. Dr. Beth Mayer-Davis (Professor, USC School of Public Health) has reported on a major multi-center study of Diabetes in Youth. The study documents a prevalence of 2200 young people under age 20 with diabetes in SC. 300 of those have type 2 diabetes, related to obesity and sedentary lifestyles. We have several websites which highlight recent developments in diabetes research for health professionals, and we continue with our very successful programs to train more Certified Diabetes Educators.

Our surveillance efforts indicate that these programs are contributing to positive results. People with diabetes are now checking blood glucose, hemoglobin A1c, lipids, blood pressure, feet, and eye with increasing frequency. They report that they are less inactive than in previous years. Trends are downward in amputations and in heart attacks and strokes among people hospitalized with diabetes. Kidney failure leading to dialysis is increasing, however. This may partially be due to increased longevity of these patients; however, new preventive measures have been found in large scale national collaborative trials. A significant decrease in the rates of renal failure in people with diabetes in S.C. in future years is predicted.

We developed an important new program on Intensive Diabetes Management in the Hospital. A Steering Committee, directed by K. Sue Haddock, RN, PhD, is implementing this program. Support has been received from the SC Hospital Association and the SC Organization of Nurse Executives. Well developed programs, which can serve as examples to other hospitals, are operative at MUSC, USC, Greenville, and Sumter. There is ample evidence that programs of this type can substantially reduce morbidity, mortality, costs, and re-hospitalization for people hospitalized for diabetes and its complications.

We are optimistic that our multifaceted statewide program will continue to make a real impact upon diabetes and its complications in SC. Our 10 Year Strategic Plan (1998 – 2008) is nearing its completion, and we expect to document success in many areas defined in the plan in future Annual Reports.
HISTORICAL BACKGROUND
HISTORICAL BACKGROUND

In 1991, the Division of Diabetes Translation, Centers for Disease Control, Atlanta, Georgia, published updated trends in diabetes and in diabetic complications in the United States, between 1980 and 1989. Major trends included an increasing prevalence of diabetes and increasing hospitalization rates among diabetic individuals for the serious complications of amputations, end stage renal disease, myocardial infarctions and cardiovascular death. The prevalence of diabetes was doubled in blacks when compared with whites. There was an increase in all major cardiovascular complications among blacks with diabetes. Diabetes was the leading cause of blindness among adults, and women with diabetes were at an increase risk for adverse outcomes of pregnancy.

These issues were magnified in South Carolina, relative to most other states in the United States. Diabetes prevalence was estimated at 6.1%, 5th among 38 states surveyed. Diabetes as a contributor to mortality was increasing in incidence in South Carolina and diabetes accounted for approximately 11% of hospital admissions. Overall, 14% of hospital beds were occupied by people with diabetes. Longitudinal data in the decade of 1980-1990 revealed increases in the prevalence of excess weight, self-reported hypertension and high blood cholesterol in individuals known to have diabetes. Hospitalization rates for renal failure, amputation, and myocardial infarction were increasing and the mortality rate for diabetes as one of the listed causes of death in South Carolina was steadily rising, from 50.7/100,000 population in 1980 to 71.1/100,000 population in 1992.

Shortages of health care professionals involved in care for people with diabetes were recognized. In particular, there were inadequate numbers of primary care physicians, endocrinologists, nephrologists, certified diabetes educators, podiatrists, and pharmacists trained in the care of people with diabetes. Major physician health professional shortages were identified by the Office of Primary Care, S.C. DHEC in 50% of the 48 countries in South Carolina and 74% of the counties in the state were designated by the S.C. State Health and Human Services Commission as medically underserved.

Crude estimates of quality of care for people with diabetes were made. In one survey of type 2 diabetes patients in 1994, 24% had not seen a medical doctor in the past year for diabetes, only 34% reported that they checked blood glucose at least once a day, and a mere 28% had ever heard of HbA1c. Of these, only 18% had an A1C check in the past year. Approximately one quarter of the diabetes individuals reported eye examinations and less than half said they had a foot examination in the past year. It was found that diabetes education had been provided to less than 50% of diabetic individuals.

Evidence was appearing from large scale collaborative clinical trials that the risks of morbidity and mortality from such cardiovascular complications as myocardial infarction and stroke could be substantially reduced by intensive management of lipid profiles and elevated blood pressure. In 1993, the seminal report from the Diabetes Control and Complications Trial (DCCT) established that intensive glycemic regulation in type 1 diabetes would substantially decrease the risks for the progression of retinopathy, nephropathy, and neuropathy. Simple, inexpensive low dose aspirin therapy produced modest risk reductions for myocardial infarction as a secondary prevention strategy. Microalbuminuria was recognized as a risk marker for cardiovascular events and for renal failure, and it was predicted that intervention trials with angiotensin converting enzyme inhibitors (ACEI) would be effective in delaying progression of these serious complications.

Thus, a serious public health problem of diabetes and its complications was recognized in South Carolina and in the United States. An undersupply of qualified health professionals was on hand to deal with the increasing demands of more intensive education and health care for people with diabetes. Ominous upward trends in mortality and morbidity statistics were present, and an increasing incidence of markers of future cardiovascular events (hypertension, cholesterol, over weight/obesity) was occurring. It was evident that an action plan was needed.
The Diabetes Initiative of South Carolina (DSC) was created by legislative action and signed into law by the Governor of South Carolina in July, 1994. The law established a Board of Directors with members appointed by the top officials of key organizations with an interest in diabetes and its complications. The Board has met quarterly since that time and has annually submits this Report. It is referred for progress review by the Legislature and the Governor.

The Organization Chart of the Diabetes Initiative of South Carolina is shown below:

There are three Councils; the Center of Excellence, Outreach, and Surveillance Council. There is a Diabetes Center of Excellence, established in the original legislation, based at the Medical University of South Carolina. This Center is responsible for administering the many activities and programs of DSC and its Board and Councils. It is also responsible for developing and administering professional education programs for health professionals of all varieties in South Carolina, to improve their knowledge and abilities to care for people with diabetes in our state. The Outreach Council is responsible for community interface, with a broad goal of improving diabetes care and education directed at people affected by diabetes. The Surveillance Council is responsible for acquiring, analyzing and distributing epidemiologic information about diabetes including its prevalence, costs, morbidity, and mortality. This Council works closely with the Diabetes Control Project of SC Department of Health and Environmental Control, and issues regular Burden Reports on the scope and impact of diabetes in South Carolina. A DSC site has been established in the School of Medicine at USC, and provides a critical mechanism for liaison between the two schools and for oversight of programs and activities in the midlands and upstate regions of South Carolina.

We also regularly interact with the American Diabetes Association, Carolinas Center for Medical Excellence, the Hypertension Initiative of South Carolina and the Area Health Education Consortium. Full reports from key components in the DSC structure are included in this Report.
10 YEAR STRATEGIC PLAN
The DSC Board developed a Long Range Strategic Plan in 1998, and has been monitoring results relating to its goals and objectives on a regular basis. The plan has 9 major goals, and The Board expects quantitative evidence of progress towards achieving these goals during the ten year time span of The Plan, 1998 - 2008. These goals are:

**Goal I:** To improve knowledge of diabetes, quality of life, and access to prevention and intervention services for people at risk and those affected by diabetes.

**Goal II:** To increase the utilization of short-term (surrogate) measures which lead to actions that will delay progression of complications of diabetes.

**Goal III:** To address the needs of persons at risk and with diabetes by increasing services and education in health professional shortage areas in South Carolina.

**Goal IV:** To reduce the morbidity rates from diabetes-related complications.

**Goal V:** To reduce the age-adjusted mortality rates from diabetes and its complications.

**Goal VI:** To decrease risks for select groups of people with diabetes where the prevalence and complication rates exceed those of others.

**Goal VII:** To reduce preventable hospital admissions and charges for diabetes.

**Goal VIII:** To reduce preventable visits to the emergency room by people with diabetes.

**Goal IX:** To improve the statistical basis for estimating the prevalence of diabetes in South Carolina.

The mechanisms by which these goals may be achieved are given in the following outline.
Diabetes Initiative of South Carolina

People at Risk or with Diabetes

Improve Knowledge and Access to Prevention, and Intervention Services for Diabetes

Utilization of Measures and Actions that Decrease Risks and Complications

Expand HMO/Insurance Coverage for Diabetes Care, Supplies and Education

Health Professional Education

Community-based & Patient Education

Improve Public Awareness Through Media Channels

Costs for Complications

Unnecessary Hospital Admissions

Premature Deaths

ER Visits for Preventable Complications

Morbidities & Disabilities

Improve Quality of Life
In calendar year 2004, we completed a review of 5 years of progress which concentrated on the first 3 goals of the 10 Year Strategic Plan. We recognized that the legislation had created a uniquely successful statewide collaborative effort. Programs were generally on target and were productive. Examples were community outreach, professional and patient education programs, and surveillance of trends in diabetes care. It was recognized, however, that prevalence of diabetes and obesity was increasing, and that comorbidities such as hypertension and altered blood lipids complicated overall management. Major extramural grant funding for community-based programs and clinical trials had been acquired at MUSC and at USC. Overall, progress with that unique combination of public and private resources (federal, state, regional and local support) had been exciting.

In calendar year 2006, as described in this report, we have made impressive progress. In 2007, we plan to focus on the 10 Year Strategic Plan, with a goal of addressing specific progress in each of the nine goals of the Plan. We believe that the programs have been operative for a sufficient time to begin to see trends in morbidity, mortality, hospitalizations, emergency room visits, and health disparities among people with diabetes in South Carolina. After this analysis by the Board, Councils, and major partners, we anticipate the publication of a monograph at the 10 year mark in 2008. Areas of defined advances will be described as well as issues which require further attention. Since diabetes mellitus is a chronic disease with very long term complications, it is likely that another decade (or more) of work will be needed to be certain that promising trends are sustained and real.
BUDGET AND SUPPLEMENTAL SUPPORT
BUDGET

FY 2005 – 2006
State Appropriation
$266,935

SUPPLEMENTAL SUPPORT

The establishment of the Diabetes Initiative of South Carolina has had a major objective to at least match state funding with outside grant support. We have consistently exceeded state support, each year since the Diabetes Initiative was created in 1994. We are pleased to report major success in this area in fiscal year 2006 – 2007.

1. **The Deans Rural Primary Care Clerkship**: a continuous-improvement, community-oriented primary care clerkship, serving rural, underserved populations. It is designed for third year medical students at MUSC and USC to develop a community-based training program of diabetes education and care. The Diabetes Initiative participated in preparation of curricular material and interacts with faculty and students of the program. PI: Dr. Alec Chessman at MUSC. (Completed 2005)

2. **EXPORT** Center on Metabolic Syndrome and Minority Health is funded by NIH’s National Center on Minority Health and Health Disparities. This five-year grant aims to promote research to reduce health disparities with supports for a partnership between MUSC and South Carolina State University. EXPORT focuses on diabetes, hypertension, obesity, and lipid abnormalities which are major contributors to health disparities. PI: Dr. Sabra Slaughter at MUSC, and Dr. James Walker, Jr. at SCSU.

3. **South Carolina Diabetes Control Program-DHEC (SC DCP-DHEC)**: This is a grant continuation from the Centers for Disease Control and Prevention (CDC) for a statewide Diabetes Control Program. Its goal and objectives are to integrate and complement the Strategic Plan of the Diabetes Initiative of South Carolina. The DSC Board of Directors provides oversight. PI: Rhonda Hill, Ph.D.

4. **The Charleston and Georgetown Diabetes Coalition—Racial and Ethnic Approaches to Community Health (REACH) 2010**, is funded by the Centers for Disease Control and Prevention (CDCP). It is working with Charleston and Georgetown counties to reduce disparities of diabetes awareness, health care access, diabetes education, and complications of diabetes complications in African Americans. PI: Dr. Carolyn Jenkins at MUSC.

5. **EXCEED**, is a program project aiming at understanding and eliminating health disparities in blacks in South Carolina, funded by the Agency for Healthcare Research and Quality (AHRQ), the U.S. Department of Health and Human Services. It is designed to reduce racial disparity in cardiovascular disease through improved blood pressure control, to implement healthcare delivery models in African Americans with diabetes, and to provide concordant care to African Americans with diabetes and depression. Under the grant, a multi-disciplinary team analyzes contributing factors for inequalities related to the delivery and practice of health care, and identifies and implements strategies to improve the process. PI Dr. Barbara Tilley at MUSC. (Completed 2005)

6. **SEARCH (South Carolina Diabetes Child & Adolescent Registry)**. The purpose of this project is to participate in the development and implementation of a network of standardized surveillance systems of childhood diabetes that will be targeted towards accurate documentation of the prevalence and incidence of specific diabetic phenotypes among diverse populations. The South Carolina site is also responsible for dietary assessment across all six clinical centers nationwide. PI: Dr. Elizabeth Mayer-Davis at U.S.C. (Completed 2005)

7. **Defining Diabetes in Youth**. This is a study of the demographic, behavioral, metabolic, and genetic characteristics of various types of diabetes that occur in children and to evaluate, in a case-control design, risk factors for the various types of diabetes in youth with a focus on etiology of type 2 diabetes in this age group. The study is an ancillary study to the SEARCH national project. (12/01/2002 – 11/30/2006). PI: Dr. Elizabeth Mayer-Davis at U.S.C.
8. **Bridging Barriers to Diabetes Care with Telemedicine.** The goal of this randomized clinical trial is to evaluate the effectiveness of a comprehensive diabetes self-management intervention that utilizes telemedicine to improve adherence to American Diabetes Association Clinical Practice Guidelines for adults with Type 2 diabetes living in rural South Carolina. PI: Dr. Richard Davis at U.S.C. and project Co-PI: Dr. Elizabeth Mayer-Davis at U.S.C.

9. **The Diabetes Prevention Program outcomes study (DPPDS)** is a follow-up to the national controlled clinical trial which demonstrated that intensive lifestyle attention to exercise and diet would lower the risk of developing type 2 diabetes. PI: Elizabeth Mayer-Davis at U.S.C.

10. **LOOK-AHEAD** is a diet assessment center directed at increasing action for health in people with diabetes. PI: Elizabeth Mayer-Davis at U.S.C.

11. **TODAY** is a study which explores various treatment options for adolescents and youths with type 2 diabetes. PI: Elizabeth Mayer-Davis at U.S.C.

12. **Markers and Mechanisms of Macrovascular Disease in Diabetes** is funded by the NIH’s National, Heart, Lung and Blood Institute. The research focuses on the roles of lipoproteins, oxidation, autoimmunity, insulin resistance, and genetics in development of vascular disease in type 1 and type 2 diabetes. PI: Dr. Maria Lopes-Virella at M.U.S.C.

13. **Collaborative Management of Diabetes in Blacks**, is funded by Agency for Health Care Policy and Research (AHCPR), focuses on diabetes management and improving health outcomes in a minority population. PI: Dr. Leonard Egede at M.U.S.C.

14. **Healthy Aging in Minority Populations: Measurement Core**, a cooperative project funded by NIH/NIA. It focuses on health issues of aging and African Americans. PI: Dr. Barbara Tilley and Project Co-PI: Dr. Arch Mainous at M.U.S.C.

15. **South Carolina COBRE for Oral Health** is funded by the NIH. This grant is to develop a multidisciplinary and interactive oral health program, particularly among African Americans. PI: Dr. Steven London at M.U.S.C.

16. **Epidemiology of Diabetes Intervention and Complications (EDIC)** is a follow-up study of the course of patients enrolled in the Diabetes Control and Complications Trial (DCCT) in Charleston. Along with patients from 27 other centers in United States and Canada, this is a study of vascular complications after long-term glycemic control in type 1 diabetes. Another 10 year follow-up (2006 – 2015) is approved. PI: Dr. John A. Colwell at M.U.S.C.

17. **Emergency Department (ED) Use by African Americans with Diabetes** is funded by NIH – National Institute for Nursing Research. This qualitative/quantitative study examines non-emergent use of the ED. PI: Dr. Carolyn H. Jenkins at M.U.S.C.

18. **SC DHEC Community Diabetes Prevention and Management** grant is funded by SC DHHS. The goals are to increase awareness of the risks and self care needs in the community and implementation of the SC DHEC “Diabetes Educator Connect” program in rural physician offices. The expected outcomes are the training of lay community educators to deliver Diabetes 101 presentations and improvement in delivery of diabetes standards of care in the MD offices. PI: Gwen A. Davis, MN, RN, CDE.
SUMMARY OF SUPPLEMENTAL SUPPORT

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<th>P.I.</th>
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Comment

We are seeing increased growth in outside yearly funding of programs in education, care, and clinical research, which affect people with diabetes in SC. Total funding now exceeds $53 million, and yearly funding exceeds $9.5 million. This yearly extramural funding is more than 35 times our current state-appropriated budget. Thus, the modest investment that the state has provided for the Diabetes Initiative of South Carolina’s core funding has paid very impressive dividends in attracting extramural support for 16 long term projects which address a wide variety of issues relating to diabetes and its complications.
DIABETES INITIATIVE OF SOUTH CAROLINA
OUTREACH COUNCIL ANNUAL REPORT
JANUARY 1, 2006 – DECEMBER 31, 2006
Functions

As defined by Section 44-39-50 amendment to 1976 Code of Laws for South Carolina, the Diabetes Outreach Council shall oversee and direct efforts in patient education and primary care including:

1. Promoting adherence to national standards of education and care.
2. Ongoing assessment of patient care, costs, and reimbursement issues for persons with diabetes in South Carolina.
3. Preparing an annual report and budget proposal for submission to the Diabetes Initiative of South Carolina Board.

Prominent 2006 Activities

REACH: Charleston and Georgetown Diabetes Coalition

The REACH 2010: Charleston and Georgetown Diabetes Coalition is a partnership between the Charleston and Georgetown communities and MUSC College of Nursing to decrease disparities for African Americans (AfAs) with diabetes. The Diabetes Initiative serves as the Central Coordinating Agency and the program is funded by the Centers for Disease Control and Prevention. Local community groups, health care professionals (HCPs), and people with diabetes identify assets, implement, and evaluate community action plan.

The partnership includes 16 agencies, neighborhoods, and people with diabetes and covers >1600 square miles, with over 12,000 identified AfAs with diabetes. The actions include 1) community-driven education where people live, worship, work, play, and seek health care; 2) evidence-based health systems change; and 3) coalition power built through trust, collaboration, and sound business planning. The HCPs bring the “science of diabetes” while the community determines how to implement the science and together the Coalition works to eliminate disparities. Currently, the Coalition is providing a series of eight (8) weekly diabetes self-management education classes in eight (8) sites for those unable to obtain self-management education through other providers and ongoing support groups led by lay leaders in ten (10) sites. The Coalition has at least 20 students who participate in Service Learning projects each year, and has served as the research site for five (5) doctoral dissertations. Additional funding is generated by community fundraising and coalition activities. The funding is used to provide meters and testing strips for those who are uninsured and unable to purchase strips.

The Coalition evaluates progress and plans for each year through community surveys, focus groups, chart audits, minutes of meetings, and epidemiological data. Our evaluation model is shown below:

Evaluation using REACH Logic Model
Progress in eliminating disparities includes eliminating significant health care disparities in diabetes testing, decreasing emergency room visits, and decreasing amputations in AfA men by 50%. The Coalition continues to work on improving diabetes control. These graphs illustrate the progress of the Coalition in improving care and reducing disparities:
Resources and materials available for dissemination include:

**Patient Report Card** (Control Your Diabetes) Over the past 6 years, 26,000 copies have been distributed to people with diabetes. The card is available on DSC and REACH websites.

**My Guide to Sugar Diabetes** Over the past 6 years more than 65,000 copies have been printed and distributed by SC DHEC and REACH. The guide helps people with diabetes improve self-management. The guide is available on the REACH website.

**Feet Education Module** including lessons plans and slide series.

**Diabetes Education Lessons** (8 modules) based on ADA’s content areas for diabetes education and adapted for low literacy populations with diabetes.

The REACH 2010 Charleston and Georgetown Diabetes Coalition has been nationally recognized with the 5th annual Community-Campus Partnerships for Health (CCPH) Award. For more information see: [http://depts.washington.edu/ccph/awards2006-reach2010.html](http://depts.washington.edu/ccph/awards2006-reach2010.html)

**REACH Library Program**

Health disparities may be reduced if more African Americans get access to and learn how to use the Internet and libraries to get up-to-date, quality information on diabetes and related health issues to improve diabetes self-management skills and care. The REACH library program brings together faith organizations, public and medical libraries, other community groups and REACH faculty and staff to help people learn more about diabetes by using the Internet and libraries. A Steering Committee develops interventions to address low health information literacy and digital divide issues related to health disparities.

REACH library program accomplishments:

- Built a steering committee of leaders and organizations to address diabetes information issues. The group has held nine meetings, conducted a community health information needs assessment, created and implemented an action plan to increase health information access and knowledge, and evaluates the process outcomes and impact of the program.

- Installed and maintains new Internet access computers in 5 locations: in Charleston, Greater St. Peter’s Church of Our Lord Jesus Christ, Wadmalaw Island Community Center, and Wiltown Community Center, and in Georgetown, Nazareth A.M.E. Church, and Georgetown County Diabetes CORE Group’s headquarters at the Choppee Health Complex.

- Developed and implemented an ongoing community-based train-the-trainer program to teach volunteers how to access health information and judge the quality of diabetes information on the Internet and in libraries.

- Developed a teaching curriculum with several modules: The Basics--1) Diabetes and Health Information, and the Options--2) Keyboard Basics, 3) Computer Basics, 4) Internet Basics, 5) WORD Basics. The curriculum teaches people to use quality health websites, such as MedlinePlus, Hands-on-Health SC (a GoLocal site for local services), and the American Diabetes Association’s website.

- Held 188 training sessions and taught 2,247 individuals at community training sites about recommended diabetes resources from May 2005 through April 2006.

- Held 3 focus groups in Charleston and Georgetown to help evaluate the program.

  *Several comments from focus group participants summarize the program’s impact.*

  **Public librarian:** “This project has far reaching effects and it is truly about that whole thing about a drop creating a ripple. We have touched some people who might not have ever been touched with literally life changing information and that is so powerful.”

  **Program participant:** “I got into the class to learn how to do the computer. Once I got into the program, I log on to Medline[Plus] and I found the subject that was presenting to me which was high blood pressure and hypertension. I got all the information through that. I printed from that information, so I could study on it.”

12

The REACH library partnership remains a close working group of organizations committed to health information outreach. Ongoing priorities are: 1) to promote high quality diabetes information resources, 2) to maintain and expand information access and services in underserved communities, 3) to develop and test interactive web resources to support patient-oriented diabetes decision making and knowledge, and 4) to investigate effective interventions to address low health literacy.
Major Accomplishments

1. Conducted the following professional education programs:

   No. Courses | No. Attendees
   ------------|-------------
   1. Twelfth Annual Diabetes Symposium and Preconference | 2 | 436
   2. Certified Diabetes Educator Programs | 1 | 115
   3. Foot Care Courses | 2 | 24

2. Coordinated ongoing programs in specialized patient education and care:

   • Intensive Diabetes Education, Awareness, and Lifestyle (IDEAL) Program: Type 1 and Type 2 patients.

3. Presented the following Academic programs:

   • Third Year Medical Student Program: Third year medical students are rotated into defined communities, with monthly assignments in the offices of carefully chosen primary care physicians. They concentrate on diabetic patients in the assigned practice. They develop community projects directed at people with diabetes as part of the rotation. In 2006 all 3rd year students in South Carolina received this experience.

4. Entered 3rd decade of study in The Diabetes Control and Complications Trial (DCCT) and Epidemiology of Diabetes Interventions and Complications (EDIC).

   This is a landmark long term study of the effect of intensive glycemic control on vascular complications in 1551 individuals with type 1 diabetes. It began as the Diabetes Control and Complications Trial (1983 – 1993), which showed conclusively, and for the first time, that intensive glycemic control would reduce the risk for progression of retinopathy, nephropathy, and neuropathy in people with type 1 diabetes by 45 – 75%. The second phase of the study, EDIC, was started in 1994 and completed in 2005. It demonstrated that the previous six years of intensive management continued to have an effect in reducing progression or retinopathy and nephropathy. This was seen, even though the two groups had comparable glycemic control over the second 10 years of follow-up. Importantly, recent analyses have shown, for the first time, the period of intensive glycemic management was associated with a decreased risk in macrovascular events (heart attacks, strokes). Because of the invaluable contributions of this long term study to guidelines for diabetes care and to our understanding of how to prevent diabetic vascular complications, the NIDDK(NIH) has approved EDIC investigators for another 10 years of study.

   John A. Colwell, MD, PhD has been the principal investigator in Charleston for this trial since 1983. He was instrumental in its conception, planning and design.

5. Other accomplishments:

   • Assisted in the development and ongoing development, implementation and evaluation of Hospital Protocols for Intensive Diabetes Management.
   • Accepted professional abstracts, posters and invited oral presentation:


Functions
The Surveillance Council was established in 1995 to develop and implement a state-of-the-art system for the assessment of diabetes in South Carolina, and to provide a mechanism to evaluate interventions and control programs. The Council consists of diabetes care providers, epidemiologist, program specialist and researchers, and is staffed by data specialists at the South Carolina Department of Health and Environmental Control and the Medical University of South Carolina. The Council operates with formal meetings and communications.

The Council has established the following objectives:
• Develop, implement and evaluate surveillance protocols and methodologies to assess diabetes awareness and knowledge, prevalence of diabetes, access to primary care, quality of diabetes self-management, and utilization of monitoring guidelines.
• Evaluate patient and professional education programs.
• Develop and maintain a mechanism to analyze mortality, morbidity, hospitalization and survey data in production of reports to describe the burden of diabetes in South Carolina.
• Analyze the effects of co-morbidities with diabetes.
  o Establish and maintain an ongoing evaluation of the role of insurance and managed care companies in control of diabetes.
  o Function as a central unit composed of multiple organizations and disciplines involved in the surveillance of diabetes in South Carolina.
  o Function as a data and information resource for DSC and DCP and other organizations involved in diabetes control.
  o Develop and maintain an Internet Website for distribution of information regarding diabetes in South Carolina.
  o Establish a scientific forum to showcase diabetes research and projects in South Carolina.
  o Establish a methodology to estimate the prevalence of diabetes in South Carolina based on clinical data.
  o Establish a methodology to assess trends in diabetes-related outcomes and clinical practices.

Major Accomplishments
The summary of the major accomplishments follows:
• Maintenance and distribution of the Burden of Diabetes in South Carolina report and updated data which is distributed in hard copy and through the webpage.
• Development and maintenance of a diverse group of investigators in South Carolina who focus their work on the study of diabetes.
• Development and maintenance of an Internet Webpage.
• The Council has organized several reports and manuscripts focused on lower extremity amputations, cardiovascular disease, stroke hospitalizations, hypertension and in South Carolina and associated trends that identified a possible positive effect from DSC interventions.
• Kenne Mountford received a national award and recognition at the 2005 ADA meeting with his assessment and presentation of the epidemiology of amputations in South Carolina.
• Maintenance of DSC webmaster.
• Production and distribution of data slides which are distributed in hard copy and can be downloaded from the webpage Coordination of the scientific poster session in conjunction with the 2006 Diabetes Symposium. Thirty-two abstracts and posters were presented with three SC students receiving cash awards, and three community awards.
• Establishment of a working committee to identify a methodology to assess trends in clinical practices, patient behaviors and outcomes related to diabetes.
• Maintenance of a working committee to use clinical data bases to estimate the prevalence of diabetes in South Carolina.
• Establishment of a working committee to study Type 2 diabetes in young adults.
• Established a collaboration with the Hypertension Initiative to use primary care office based data base to assess risk factor control.
• Establishment of a mechanism to evaluate the intervention and education programs.
Summary Annual Report
The Surveillance Council was involved with numerous major achievements during year 12. Three areas of focus included: (1) the surveillance of diabetes-related outcomes trends, (2) clinical practices related to diabetes, (3) Medicare data, and (4) DSC webpage as a source of information and data regarding diabetes in South Carolina.

Surveillance Activities: Outcomes Trends
The surveillance activities for outcomes trends identified several key findings focused on amputations, cardiovascular disease hospitalizations, stroke hospitalizations, cardiomyopathy and hypertension. From 1996-2002, there were significant downward trends in the number and rate of lower extremity amputations in South Carolina as well as the United States as a whole. However, the downward trend for South Carolina was significantly greater than the trends for the US indicating that the rate of improvement was better than the country as a whole. Likewise during this time period, the rates for cardiovascular disease and stroke hospitalizations among individuals with diabetes have been declining. Equally important, the racial disparity gap for whites and blacks has been narrowing with progress among African Americans with diabetes showing greater improvement than their white counterparts. Similarly, no differences in case-fatality rates between hospitalized white and black individuals were detected indicating similar treatment in hospital settings in South Carolina. Cardiomyopathy remains a major complication for diabetes with similar trends and racial disparities identified in the South Carolina population.

Hypertension and Diabetes
Assessments of hypertension and diabetes identified improvements regarding outcomes among individuals with both hypertension and diabetes. While the combination of both conditions increases the risk of adverse outcomes for all individuals, the risks continue to occur earlier in life for African Americans identifying the need for early diagnosis and aggressive treatment and prevention. Analyses of the outpatient primary care patient data base form The Hypertension Initiative of South Carolina identified some improvements in the hypertension, glycemic and hyperlipidemia control levels of patients with diabetes in South Carolina. However, these analyses also identified a significant racial disparity in the control level with less than 10 % of the patients with all three conditions under optimal control.

Medicare Data
The assessment of the Medicare beneficiaries in South Carolina by Carolina Medical Review from 2005 to 2006 identified improvements in annual eye examinations from 52.85% to 54.27%; annual lipid profiles from 70.45% to 76.17%; and annual hemoglobin A1c from 81.08% to 82.99%.

DSC Webpage
The DSC webpage (www.musc.edu/diabetes) continues to be a major resource for information and data regarding diabetes in South Carolina. The number of contacts increases each month and the addition of a dedicated webmaster has increased this use.
CAMP ADAM FISHER, Inc. is South Carolina’s largest overnight camp for children with diabetes. It has been held for one week each summer since 1968 for children 6-16 years living with diabetes. Our mission is to offer all the experiences, lessons and benefits of summer camp to children with diabetes. The unique adventures of our camp are offered in a safe, well-monitored environment where professional attention can be afforded to each camper’s individual needs. The Diabetes Initiative provides the opportunity for Program Director, Elizabeth Todd Heckel, MSW, CDE to provide leadership for this camp. The physicians, nurses, dietitians and counselors from USC, MUSC and other South Carolina schools provide the professional staffing.

For many of these children it is the only opportunity to be around others struggling with the same life issues. Many have attended camp together since they were children and are now adults. They report having learned healthy diabetes management living skills and formed lifelong friendships. Our diabetes “family” of volunteers meets throughout the year planning for the next camp. In 2006 we had 163 campers and over 50 staff.

Intensive Management of Diabetes in the Hospital (IMDH)
Members: Chairperson, K. Sue Haddock, PhD; Ali Rizvi, MD; William Price, MD; Usah Lilavivat, MD; Sharm Steadman, PharmD; Pamela Arnold, MSN, CDE; Edwin Bransome, MD, Elizabeth Todd Heckel, MSW, CDE, and Julie Benke-Bennett.

During the past year the IMDH Steering Committee developed a strategic plan for improving glycemic management of hospitalized patients. Guiding principles were developed for use in consultation with participating hospitals. Hospital representatives were asked to complete a survey for baseline information prior to participating in a one-day educational workshop outlining the basic tenets of glycemic management. The workshop was attended by representatives from 15 hospitals. Steering Committee members are in the process of conducting follow-up surveys and consultation with 10 of these hospitals. As hospitals become organized in their approach to inpatient glycemic management, data will be collected to determine the effectiveness of the programs.

Major accomplishments of the Steering Committee in 2006:
- Development of Guiding Principles
- Presentation of a one-day workshop for 68 participants from 14 hospitals
- Two surveys completed with participating hospitals
- Presentation of progress at the Diabetes Symposium
**IMDH Implementation**

<table>
<thead>
<tr>
<th>Participating Hospital</th>
<th>Liaison/Consultant</th>
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<tbody>
<tr>
<td>Aiken Reg. Med. Ctr</td>
<td>Dr. Ali Rizvi / Dr. Ted Bransome</td>
</tr>
<tr>
<td>Beaufort Memorial Hospital</td>
<td>Pam Arnold</td>
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<tr>
<td>Carolinas Hospitals</td>
<td>Dr. Sue Haddock</td>
</tr>
<tr>
<td>Greenville Memorial Hospital</td>
<td>Dr. John Bruch</td>
</tr>
<tr>
<td>McLeod Regional Medical Center</td>
<td>Dr. Sue Haddock (Marilyn Henderson)</td>
</tr>
<tr>
<td>Medical University of South Carolina</td>
<td>Pam Arnold</td>
</tr>
<tr>
<td>Palmetto Health Baptist</td>
<td>Dr. Sharm Steadman (Nell hair, Jan Lander)</td>
</tr>
<tr>
<td>Palmetto Health Heart Hospital</td>
<td>Sharm Steadman (Susan Low, Dr. Scott Petit)</td>
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<tr>
<td>Palmetto Health Richland</td>
<td>Dr. Ali Rizvi, Dr. Sharm Steadman</td>
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<tr>
<td>Piedmont Medical Center</td>
<td>Dr. Bill Price (Karen Kohn)</td>
</tr>
<tr>
<td>Spartanburg Regional</td>
<td>Dr. Bill Price</td>
</tr>
<tr>
<td>Tri-County Regional Health Center (Orangeburg)</td>
<td>Elizabeth Todd Heckel, Dr. Charles Raine</td>
</tr>
<tr>
<td>Trident Medical Center</td>
<td>Elizabeth Todd Heckel, Pam Arnold</td>
</tr>
<tr>
<td>Tuomey Hospital</td>
<td>Dr. Usah Lilavivat</td>
</tr>
<tr>
<td>WJB Dorn VAMC</td>
<td>Dr. Sue Haddock</td>
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</table>

**SEARCH for Diabetes in Youth**

This national research is having historic significance on the typing of diabetes in youth.

Beth Mayer-Davis, PhD was awarded a $3 million grant. In total, Dr Mayer-Davis and her team have brought in nearly $10 million in research funding from the Centers for Disease Control and Prevention and the National Institutes of Health to USC for research in childhood diabetes. These awards have positioned USC’s Arnold School of Public Health among the nation’s leading institutions conducting research on Type 1 and 2 diabetes in young people, including trends in these diseases over time, and how diabetes impacts on the health and well-being of these children and their families.

**FINDING** from the first SEARCH study:
- Approximately 2,200 young people under age 20 – including 800 African Americans – in South Carolina have diabetes; 300 have Type 2 diabetes, generally associated with obesity and sedentary lifestyles;
- Of children with diabetes, 17 percent of those between 10 and 19 had Type 2 diabetes; 83 percent had Type 1;
• 93 percent of youth with Type 2 diabetes have metabolic syndrome (MetS) characterized by a group of risk factors in one person—obesity, high blood pressure, high triglycerides and high cholesterol— that can lead to heart disease, stroke and peripheral vascular disease
• About 90 percent of youth with diabetes age 10 and older are getting more saturated fats in their diets than is recommended, and consumption of fruits and vegetables is low

**Diabetes TeleCare**

Drs. Davis and Mayer-Davis were awarded over $2 million by the National Institutes of Health to evaluate use of telemedicine to facilitate diabetes self-management education for adults with diabetes who live in rural communities of South Carolina. This grant follows on previous work by these investigators, which in total represents the research designed to improve health of individuals with diabetes living in medically underserved regions of the state.

**Participation in Major National Diabetes Clinical Trials**

Dr. Mayer-Davis and her team are actively participating in three major national clinical trials funded by the National Institutes of Health. These trials are designed to evaluate approaches for primary prevention of diabetes in adults, reduction of risk for cardiovascular disease in adults with diabetes, and treatment for adolescents with type 2 diabetes. For each of these, the University of South Carolina Center for Research in Nutrition and Health Disparities is responsible for dietary assessment studywide, inclusive of thousands of study participants nationwide.

**Honors and Awards**

Dr. Mayer-Davis serves on the national Board of Directors for the American Diabetes Association and was named the University of South Carolina’s 2006 Carolina Distinguished Professor.
The SC DPCP is one of 59 states and territories funded by CDC to promote diabetes awareness, prevention, and self-management. The program places an emphasis on high risk populations, disproportionately burdened by diabetes. The following are goals the SC DPCP are currently working on:

1. Monitor the burden of diabetes and surveillance.
2. Increase the percentage of persons with diabetes in South Carolina who receives foot and eye exams, influenza and pneumonia vaccinations, and A1c tests.
4. Establish linkages to promote wellness, physical activity, weight and blood pressure control, and smoking cessation.

Prominent 2006 Activities

**Diabetes 101 Trainings**
The SC DPCP developed a community awareness curriculum entitled “Diabetes 101” for the disparate communities we serve. This program focuses on the risk for diabetes; promotion of awareness of diabetes, signs and symptoms; management and prevention; physical activity and healthy eating; and addresses knowing your “ABCs”- A1c, blood pressure, and cholesterol. There is also a train-the-trainer section of the curriculum that enables lay health educators that have attended the presentation portion of the curriculum become presenters within their own communities. Many health care educators know what to look for in disease management but are not adequately equipped to present the information effectively to the community. The training is approximately three hours and includes a review of the materials from the initial presentation, teaching techniques, and teach-back opportunities. It is designed for lay health educators but has been very popular with health care providers as well.

From January 2006 to November 15, 2006, a total of 43 presentation workshops with 1114 participants were conducted. From those workshops, 55 people across the state representing 22 of the 46 counties were trained as lay health presenters. The SC DPCP goal is to have at least two trained educators in each county. Evaluation has shown participants’ have gained knowledge from the Diabetes 101 workshops and that this initiative is an effective avenue in meeting some of the needs of the communities.

**South Carolina African American Conference on Diabetes**
The Annual African American Conference on Diabetes celebrated its 10th anniversary on November 6, 2006 at Brookland Baptist Conference Center in West Columbia with 834 participants, 42 exhibitors and 20 staff and volunteers. The theme this year, “Living With Diabetes – You’re Not Alone” was very appropriate and led into sessions that included, What is Diabetes and How Can We Stop the Epidemic, How We Save the Body and Soul, Ask the Doctor, Black Men’s Health, Another Food Pyramid: How Do I Use It, and How to Check Your Feet. Conference evaluations are currently under review.

This tenth year was a milestone for the Diabetes Today Advisory Council (DTAC), a community based group of African American health care professionals, paraprofessionals and other concerned health advocates who developed the concept 12 years ago as a venue to a) increase awareness, b) provide up-to-date information and c) assist in community-based prevention activities for African American with or at risk for diabetes. For many of the participants, this is the only opportunity they have to learn more about prevention and control of diabetes and other chronic diseases that disparately affect their community.

For the last 8 years, DTAC has partnered with the Diabetes Prevention and Control Program (DPCP), a division of the South Carolina Department of Health and Environmental Control (SC DHEC). The conference originally was a partnership between DTAC, the American Diabetes Association, the Sisters of Charity and Providence Hospital in 1997 and 1998 with 184 and 345 respectfully people in attendance. In 1999, DTAC formed a partnership with DHEC, especially the Diabetes Division and the conference has grown with attendance ranging from 450 and 1100 and over the past 10 years has grown to be the largest health awareness event for community people in the state.
Local Diabetes Coalitions
The SC DPCP continues to provide technical assistance to local coalition chapters in the form of skills building exercises, creative partnering and resource finding, grant writing workshops, and mini-grants. Mini-grant recipients continue to work on their objectives for FY 06-07 including building infrastructure and focusing on proceeding to the implementation stage to provide activities that are aimed at reducing the burden of diabetes in their communities. The SC DPCP has funded the following eight community coalitions for FY 06-07:

Capacity building funding in the amount of $3000
- Aiken County Diabetes Coalition (Region 5)
- York County Diabetes Coalition (Region 3)
- Lancaster County Diabetes Coalition (Region 3)
- Horry County Diabetes Coalition (Region 6)
- Nutrition Plus (Region 3)
- Dream Fighting Boxing Youth Diabetes and Obesity Initiative (Region 3)

Basic implementation funding in the amount ranging from $13,998.60 -$14,000
- Low Country Diabetes Initiative (Region 8 - $13,998.60)
- Williamsburg Diabetes Education and Control Coalition (Region 6 - $14,000)

Coalition Activities
Coalition activities planned for this grant cycle include partnering with local community health centers to sponsor "Take a Love One for a Check-up Day", Diabetes Today Training, Diabetes 101 Training, mini-diabetes community conferences, faith based nutrition/exercise programs, developing or updating an existing diabetes resource guide, conducting diabetes road shows, hosting "Ask the Doctor" community sessions, implementing 6-week walking clubs, and providing quarterly nutritional cooking classes.

Low Country Diabetes Initiative and Williamsburg Diabetes Education and Control Coalition have partnered with the local Community Health Center to work towards bridging the gaps between community residents and health organizations to improve health outcomes for county residents. The funding period began June 1, 2006 and will end March 29, 2007. Activities will take place at least quarterly.

Four new coalitions have been added to the growing list of coalitions across South Carolina; Aiken County Diabetes Coalition (Region 5), York County Diabetes Coalition (Region 3), Nutrition Plus (Region 3), and Dream Fighting Boxing Youth Diabetes and Obesity Initiative (Region 3). With the addition of these four coalitions, that brings the total to 39 coalitions across the state. Of the 39 coalitions, 12 of them are currently still active and producing outcomes while the remaining 27 have experienced challenges and need leadership and guidance. The SC DPCP will provide them with training and skills to improve their community capacity. The Statewide Coalition Coordinator will develop a letter to send the 27 coalitions that are experiencing challenges to find out how the SC DPCP can help them become active again.

Bi-Annual Coalition Meetings
Each year the South Carolina Diabetes Prevention and Control Program hosts two meetings where all of the coalitions are invited. One meeting was in April (mid-year training) and the other (statewide coalition meeting) is always the day before the Diabetes Winter Symposium and is co-hosted by the Diabetes Initiative of South Carolina.

The SC DPCP hosted the 3rd Annual Coalition Mid-Year Training on April 12, 2006 in Columbia, SC with 26 coalition members representing ten counties along with other agencies and community organizations present. At this year's training, the morning session was focused on how to complete the 2006-2007 mini-grant application, including how to complete the required quarterly reports and invoices. During the afternoon session, the Lay Health Facilitator from the SC DPCP presented the Diabetes 101 curriculum. The coalition members that took part in the Diabetes 101 presentation during the mid-year training were given the opportunity to participate in the train-the-trainer portion of the curriculum during the morning of the annual statewide coalition meeting on September 13, 2006 in Charleston, SC.
This year was the sixth annual statewide meeting in Charleston on September 13, 2006 with a total of 32 coalition members in attendance. The first part of the meeting focused on any questions the funded coalitions had regarding the mini-grant process and how to complete the required quarterly reports and invoices. The second part of the meeting gave an overview of a health program developed for African American churches, entitled Body & Soul. The program encourages church members to eat a healthy diet rich in fruits and vegetables every day for better health. Churches that embrace Body & Soul help their members take care of their bodies as well as their spirits. Upon completion of the statewide meeting, five of the coalitions displayed posters depicting success stories within their group. Low Country Diabetes Initiative and Williamsburg Diabetes Education and Control Coalition both won a monetary prize for their poster displays.

Health Systems Collaboration
The SC DPCP Health Systems technical assistance is focused in 13 of the 14 Community Health Centers that are a part of the Diabetes Collaborative. The SC DPCP has MOAs with the Centers listed below:

1. Beaufort-Jasper-Hampton Comprehensive Health Services
2. Black River Healthcare
3. CareSouth Carolina (Darlington/Hartsville)
4. Carolina Health Centers
5. Family Health Center (Orangeburg)
6. Health Care Partners (Conway)
7. Little River Medical Center
8. Margaret J. Weston Medical Center
9. New Horizon Family Health Services (Greenville)
10. Regenesis Community Health Center
11. Richland Community Health Care Association
12. Sandhills Medical Foundation (Jefferson)
13. St. James Santee Family Health Center

The “4th Annual Diabetes/CVH Winter Symposium” was held in Myrtle Beach on March 3-4, 2006. This year's topics concentrated on prevention and treatment across the life span. The topic titles included:

- Working Together to Make a Difference - Everyday Heroes
- Pay for Performance: Implications for Primary Care Physicians
- Diagnosis/Treatment of Metabolic Syndrome
- Prevention of Metabolic Syndrome: You Can Make a Difference
- Patients’ Behavioral Changes: Doing the Right Thing – The Seven Principles
- Cholesterol/Lipids: Research and Application.
- Obesity Treatment and Prevention
- Youth: Growing Up With Diabetes.
- Childbearing Years: Being Productive with Diabetes
- Older Adult: Living Long With Diabetes

The Symposium was attended by 154 health care providers from across the state of South Carolina, which included 32 MDs, 15 NPs, 33 RNs, 15 RDs, 16 LPNs and 43 other disciplines. Fifteen out of 18 invited Community Health Centers in the state participated in the event. Also, diabetes educators, nurses, dietitians, and health educators from the local health departments were in attendance. The make up of the symposium attendees is significant because they are the ones who take care of the majority of indigent patients and people with low socioeconomic status who are disproportionately affected by diabetes/CVD and other chronic disease complications in the state.

*Continuing Medical Education credits for physicians and continuing education credits for nurses, dietitians, and social workers were provided.
DIABETES INITIATIVE OF SOUTH CAROLINA
BOARD OF DIRECTORS AND COUNCIL MEMBERS
Diabetes Initiative of South Carolina

Board of Directors

**Members**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Institution</th>
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<tbody>
<tr>
<td>John A. Colwell, MD, PhD, CDE (Chair)</td>
<td>Director, Diabetes Center, MUSC</td>
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<tr>
<td>Pamela Arnold, RN, MSN, CDE</td>
<td>Diabetes Center, MUSC</td>
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<tr>
<td>John Bruch, MD</td>
<td>Greenville Hospital System</td>
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<tr>
<td>Melanie Giese, RN</td>
<td>SC DHHS, Finance Commission</td>
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<tr>
<td>K. Sue Haddock, RN, PhD</td>
<td>IMDH Steering Committee, Wm. Jennings Bryan Dorn VA Medical Center</td>
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<td>Elizabeth Todd Heckel, MSW, CDE</td>
<td>USC/DSC Site, University of SC</td>
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<tr>
<td>Carolyn Jenkins, DrPH, APRN, RD, CDE</td>
<td>Outreach Council, College of Nursing, MUSC</td>
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<tr>
<td>David Keisler, MD</td>
<td>SC Academy of Family Physicians</td>
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<tr>
<td>Arthur Kennedy, MD</td>
<td>Private Practice, Orangeburg</td>
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<tr>
<td>Daniel Lackland, Dr.PH</td>
<td>Surveillance Council, Biometry/Epidemiology, MUSC</td>
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<tr>
<td>Usah Lilavivat, MD</td>
<td>Internal Medicine, Sumter</td>
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<tr>
<td>Elizabeth Mayer-Davis, PhD</td>
<td>USC School of Public Health</td>
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<tr>
<td>Ronald Mayfield, MD</td>
<td>Endocrinology, Spartanburg</td>
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<tr>
<td>Edi McNinch, RN, CDE</td>
<td>SC DHEC, Home Health Services</td>
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<tr>
<td>Al Pakalnis, MD</td>
<td>University of SC, Ophthalmology</td>
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<td>William Price, MD</td>
<td>Internal Medicine/ Endocrinology</td>
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<td>Ali Rizvi, MD</td>
<td>SC Medical Association</td>
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<tr>
<td>George Rosebrock, MD, CDE</td>
<td>ADA – Southeastern Division</td>
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<tr>
<td>Gardenia Ruff, MSW, LISW</td>
<td>SC DHEC – Minority Health</td>
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<tr>
<td>Kenneth Trogdon</td>
<td>Commun-I-Care</td>
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<tr>
<td>Lisa Waddell, MD, MPH</td>
<td>SC DHEC, Diabetes Prevention and Control Program</td>
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**Advisory Members**

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<tbody>
<tr>
<td>Edwin Bransome, MD</td>
<td>Internal Medicine/Endocrinology, IMDH Task Force</td>
</tr>
<tr>
<td>Brent Egan, MD</td>
<td>Hypertension Initiative of SC</td>
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<tr>
<td>David Garr, M.D.</td>
<td>SC AHEC</td>
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<tr>
<td>Nelson Gunter, MD</td>
<td>The Carolinas Center for Medical Excellence</td>
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<tr>
<td>Rhonda Hill, PhD, CHES</td>
<td>SC DHEC, Diabetes Prevention and Control Program</td>
</tr>
<tr>
<td>Bryon Jackson, DPM</td>
<td>Diagnostic &amp; Comprehensive Foot Care</td>
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<tr>
<td>John Little, MD</td>
<td>Companion, HMO</td>
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**Ex-Officio Members**

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<tr>
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<th>Position/Institution</th>
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<tbody>
<tr>
<td>Yaw Boateng, RD, MPH, MS</td>
<td>SC DHEC, Diabetes Prevention and Control Program</td>
</tr>
<tr>
<td>James Edwards, DMD</td>
<td>Past President, MUSC</td>
</tr>
<tr>
<td>Ed Owens</td>
<td>ADA – Southeastern Division</td>
</tr>
<tr>
<td>Stephen Smith</td>
<td>ADA – Past Board Chair</td>
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</table>
Diabetes Center Council

**Members**
Pamela Arnold, MSN, APRN, BC-ADM, CDE (Chair)  Diabetes Center, MUSC
Kathie Hermayer, MD  Endocrinology, MUSC
Carolyn Jenkins, Dr.Ph, APRN, RD, CDE  Outreach Council, MUSC
Ronald Mayfield, MD  Endocrinology, Spartanburg
Jane Parker, PNP, APRN, BC-ADM, CDE  EDIC/IDEAL, MUSC
Denise Wood, MSN, APRN, BC-ADM, CDE  EDIC/IDEAL, MUSC

**Ex-Officio Member**
John A. Colwell, MD, PhD, CDE  Director, Diabetes Center, MUSC
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<tr>
<td>Walter Bailey, MPH</td>
<td>SC Office of Research and Statistics</td>
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<tr>
<td>Yaw Boateng, MS, MPH, RD</td>
<td>SC DPCP-DHEC</td>
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<tr>
<td>David Bradford, PharmD</td>
<td>MUSC, College of Health Professions</td>
</tr>
<tr>
<td>Edwin Bransome, MD</td>
<td>Internal Medicine/Endocrinology, Aiken, SC</td>
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<tr>
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<tr>
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<td>Medical Excellence</td>
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<tr>
<td>Elizabeth Mayer-Davis, PhD</td>
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<td>Kenneth Trogdon</td>
<td>Executive Director, Commun-I-Care</td>
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### Outreach Council

**Members**

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<tr>
<th>Name</th>
<th>Affiliation</th>
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<td>Gayenell Magwood, RN, MSN</td>
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<td>Edi McNinch, RN, CDE</td>
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Intensive Management of Hospitalized Diabetic Patients
Task Force

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