Diabetes Initiative of South Carolina

2005 Annual Report

John A. Colwell, MD, PhD
Chairman, Board of Directors
Diabetes Initiative of South Carolina

DHEC
South Carolina Department of Health and Environmental Control
DIABETES CONTROL PROGRAM
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 Eleventh Annual Report (calendar year 2005). This report was requested in the Diabetes Initiative of South Carolina Act, Chapter 39, Section 44-39 of.

We have many active programs of patient education. Through our effective, ongoing collaboration with the Diabetes Control Program, SC DHEC, we have established 27 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 had lower extremity amputations in the past few years. We attribute this remarkable result to a multitude of educational programs that have directed attention of diabetic patients to regular foot examinations and visits to their health care providers.

In 2006, we will launch 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 a Task Force has developed an outstanding approach, which will be implemented in 2006.

Outside yearly funding of programs of education, care, and clinical research in diabetes now exceeds $9.4 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 2005, the emphasis on activities of the Diabetes Initiative of South Carolina is 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, 25 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 140 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 numbers of amputations in people with diabetes – around the entire state, as well as in Charleston and Georgetown counties, as a result of the REACH program. In a separate series of presentations at the ADA Annual Meeting, Dr. Beth Mayer-Davis (Professor, USC School of Public Health) reported on a major multi-center study of Diabetes in Youth. The study documents a prevalence of 25% of the metabolic syndrome among youths (age 10 – 19), with a 70% prevalence among American Indians. This is one of the important health consequences of the increase in obesity among youths in the US and in SC. 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 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 collaborative trials. A significant decrease in the rates of renal failure in people with diabetes in future years is predicted.

We developed an important new program on Intensive Diabetes Management in the Hospital. A Task Force, directed by Ted Bransome, MD has completed this program, and it is now ready to be implemented in hospitals around the state. Support has been received from the SC Hospital Association and the SC Organization of Nurse Executives. Expressions of interest in developing hospital programs have been received from 11 different sites around the state. 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 as we analyze results over the next 2 -3 years.
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.

There 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 counties 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.
10 YEAR STRATEGIC PLAN
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 board 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, Carolina Medical Review, 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.
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

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

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

Utilization of Measures and Actions that Decrease Risks and Complications

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
The Annual Progress Report of calendar year 2003 had a thorough review of 5 years of progress made in achieving the first three goals of the 10 Year Strategic Plan. That Report should be consulted for details.

Conclusions from that 5 year review were as follows:

1. A unique statewide collaborative effort has been created by the Legislature to address the needs of people affected by diabetes in South Carolina: The Diabetes Initiative of South Carolina.

2. Board and Council governance and memberships assure wide, consistent communication between key organizations and individuals concerned with addressing issues posed by diabetes in this state.

3. Close collaboration exist in the Diabetes Initiative of South Carolina between the Diabetes Control and Prevention Program, South Carolina Department of Health and Environmental Control, Carolina Medical Review, the Hypertension Initiative of South Carolina, the American Diabetes Associate (Southeastern Group), the Bureau of Health and Statistics, the two medical schools in South Carolina (M.U.S.C. and U.S.C.), and a variety of other organizations.

4. A Mission Statement and a Ten Year Strategic Plan provide goals and objectives for the overall programs.

5. Community outreach, professional and patient education programs, and ongoing surveillance are successfully established and are operative.

6. Promising trends in indicators of specialty of care and in members of trained health care personnel are developing and will predictably begin to impact favorably on outcomes in the future.

7. Offsetting those trends has been an increase in prevalence of diabetes, percentages of the diabetic population who are overweight, and an increase in the proportion of people with diabetes who have hypertension.

8. Analysis of the first 3 major goals in the 10 Year Strategic Plan at the 5th year of the Plan reveals excellent progress. In the future, analyses will focus on the other 7 goals, which are longer term in nature.

9. Major extramural grant funding for community-based programs and clinical research has been acquired.

10. We are pleased with the progress in this unique combination of public and private resources as well as Federal, State, and local support in the battle against diabetes mellitus, a major public health problem.
BUDGET AND SUPPLEMENTAL SUPPORT
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 2005 – 2006.

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.

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. Dr. Dawn Clancy has a pilot project of diabetes care research. Dr. John A. Colwell and Dr. Carolyn Jenkins serve as consultants to the program project. PI Dr. Barbara Tilley at MUSC.

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.

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 (DPPOS)** 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. The research focuses on the roles of lipoproteins, oxidation, auto-immunity, 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 (2005 – 2014) is approved. PI: Dr. John A. Colwell at M.U.S.C.

17. **The Genetics of Kidneys in Diabetes (GoKind) Study:** The goal of GoKinD is to develop a repository of DNA from type 1 diabetic patients with and without nephropathy, and their parents. The purpose is to explore the genetic basis of diabetic nephropathy. PI: Dr. John A. Colwell at M.U.S.C.
### SUMMARY OF SUPPLEMENTAL SUPPORT

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<th>P.I.</th>
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**TOTAL** | **$9,468,943** | **$53,725,593**

**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 $9.4 million. This yearly extramural funding is more than 34 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 17 long term projects which address a wide variety of issues relating to diabetes and its complications.
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.

Major Accomplishments (related to promoting adherence to national standards of education and care):

- To support adherence to national standards of education and care, South Carolina DHEC Diabetes Prevention and Control Program, in collaboration with DSC, have worked with communities to organize local Coalitions. Currently, there are 31 active Coalitions throughout South Carolina. All Coalitions are working to improve diabetes outcomes in their communities. Most are focused on outreach to people with diabetes. Approximately one million dollars in grants have been obtained by the local coalitions to improve diabetes outreach and education. Each year prior to the Annual Diabetes Symposium, the Coalitions come together for an educational session. This year the focus was on community building, mobilization, and sustainability.

- The DSC Internet Home Page is updated routinely to include the latest recommendations for diabetes care and education. The page is linked to other state and national resources for diabetes. There have been an estimated total of 21,320 “hits” or persons accessing this information. The address is http://www.musc.edu/diabetes

- DSC staff continues to support Diabetes Camp. In 2005, approximately 140 young campers with diabetes attended camp and 50 staff received continuing education for camp training.

- DSC has collaborated with more than 55 different agencies and programs to provide Programs to Persons with Diabetes. At least 33,000 persons with diabetes were reached with information to improve self-management and care. South Carolina DHEC Diabetes Prevention and Control Program, Carolina Medical Review, SC Area Health Education Centers (AHEC), SC Alliance for Managed Care, Vocational Rehabilitation, Commun-I-Care, State Prevention Partners, REACH 2010, Georgetown Diabetes CORE Group, SC Primary Care Association, Project EXPORT, South Carolina Stroke Initiative, community physicians and other health providers have collaborated with MUSC Diabetes Center and USC to promote adherence to national standards.

- “Partners in Wellness, A Collaborative Program of South Carolina’s Historically Black Colleges and Universities, and the Medical University of South Carolina to Document and reduce Risks for Hypertension and Diabetes through Student Research, Teaching, and
Service to Communities” continues to offer a wellness course that focuses on diabetes and hypertension for students enrolled in HBCUs. During 2005, approximate 12 students from Claflin University, 26 from SC State University, and 7 students from Benedict College (45 total) completed the semester long program. Program activities and networking serve as the basis for the educational component of Project EXPORT, a collaborative project with MUSC and SCSU. This project is funded by NIH’s National Center on Minority Health and Health Disparities through Project EXPORT. During the Fall semester, 4 students were mentored by Mr. Robinson in the Project EXPORT CRU (clinical research unit), working on a campus-wide wellness newsletter, a diabetes magazine and expanding the original prototype diabetes game. This year, 12 students (10 from SC State University and 2 from Benedict College) were certified as Diabetes 101 educators at the 9th Annual African American Conference on Diabetes.

- Resources and materials available to promote improved care and education include:
  - **Diabetes Risk Test and Diabetes PHD (Personal Health Decisions)** is a new risk assessment tool offered through linkage to the website of the American Diabetes Association. “It can be used to explore the effects of a wide variety of health care interventions, including losing weight, stopping smoking, and taking certain medications.

  **Certified Diabetes Educators** are currently listed on website by name, address, telephone and e-mail so that people with diabetes may access educators in their local areas.

  **Patient Report Card** (Control Your Diabetes) was developed by REACH 2010 and more than 23,000 copies have been distributed to people with diabetes. Other groups in the state are also printing and distributing to people with diabetes. The card is available on DSC and REACH website.

  **My Guide to Sugar Diabetes** has been updated and reprinted by REACH 2010. The updated version includes expanded sections on nutrition and more information on medications. Also, SC DHEC is expanding to use in their diabetes education classes. Over the past 5 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.

**Major Accomplishments (for ongoing assessment and interventions related to patient care costs/reimbursement/education issues for persons with diabetes):**

- The MUSC Diabetes Center continues to offer Intensive Diabetes Education and Lifestyles program to persons with type 1 and type 2 diabetes, and serves as a model program for other providers who are interested in starting similar programs.

- **REACH 2010: Charleston and Georgetown County Diabetes Coalition** continues to work to reduce and eliminate disparities related to diabetes in African Americans. DSC is responsible for program management. The program focuses on community development, education and empowerment; health systems change; and coalition power and sustainability. Currently, the program is providing community education to more than 12,000 African Americans with diagnosed diabetes. Program evaluation revealed that almost 100% of African Americans in REACH partnered health care sites are getting
an annual A1C and all disparities between African Americans and Caucasians are continuing to decrease. Major activities include:

- **Weekly diabetes education classes** (taught by CHA and diabetes educator) reach about 85 persons each week and are focused on building skills for diabetes self management at eight sites throughout Charleston and Georgetown counties.

- **Pre-Nursing Academy** collaboration with AHEC and Project EXPORT with 25 African American student enrolled. They learned about diabetes and metabolic syndrome during May and worked with about 200 youth from throughout South Carolina to teach them about diabetes and metabolic syndrome.

- The **National Library of Medicine** continues to fund activities to improve community capacity for computer-based diabetes education in six area libraries and 5 community sites. The community sites received a computerized network and trained volunteers to help people learn about diabetes and finding information in the libraries.

- Hospital Faith-Based Initiative, a clinical trial with 88 patients enrolled, which demonstrated that weekly telephonic case management and a volunteer network significantly increased social support and quality of life for people with diabetes.

- **9th Annual African American Diabetes Program** is co-sponsored by the Diabetes Today Advisory Council (DTAC) and SC DHEC. About 800 persons attended the one-day program. DSC assisted with foot screening.

- **Vocational Rehabilitation**: Collaboration with South Carolina Department of Vocational Rehabilitation continues. Vocational Rehabilitation received 659 referrals for primary disability of diabetes and of those 438 were rehabilitated and returned to employment.

- **Commun-I-Care** continues to link persons with diabetes in need of care and education with agencies that can provide support and care. To date in 2005, 3626 people with diabetes have received 48539 prescriptions. People with diabetes continue to report high levels of satisfaction with the program.

- **Hands on Health** is a web-based educational program disseminated by the MUSC Library that provides updated diabetes information. The program provides resource materials and computerized linkages for local libraries to better serve the education and are needs of persons with diabetes. DSC and REACH collaborate to provide information about diabetes in South Carolina.
Major Accomplishments

1. Conducted the following professional education programs:

   - Eleventh Annual Diabetes Symposium and Preconference 2 402
   - Certified Diabetes Educator Programs 1 110
   - Foot Care Courses 2 30

2. Coordinated ongoing programs in specialized patient education and care:
   - Intensive Diabetes Education, Awareness, and Lifestyle (IDEAL) Program: Type 1 and Type 2 patients.
   - Intensive Diabetes Management in the Hospital Task Force

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 2005 all 3rd year students in South Carolina received this experience.
   - Diabetes Management Cases for Nurse Practitioners.

4. Presented public programs on diabetes awareness, education, and prevention:
   - REACH 2010 Programs (seven) in Charleston and Georgetown Counties
   - Rural community health centers

5. Other accomplishments:
   - Assisted Palmetto Community Health Network with professional training and implementation of their Duke Endowment Grant activities for Diabetes in Chesterfield, Marlboro, Darlington, Dillon, Marion, Florence, and Horry counties.
   - Assisted Carolina Medical Review with Diabetes Program
   - Participated clinical research proposals, explained in Supplemental Support.
   - Presented the goals and programs of the Diabetes Initiative of South Carolina at professional meetings.
   - Developed or assisted in the development of proposals for grant funding for outreach activities.
   - Participated in the 9th Annual African American November Conference.
   - Negotiated Medicaid Contract (State health and Human Services Finance Commission) with MUSC Diabetes Center.
   - Negotiated BCBS HMO Diabetes Education Contract with MUSC Diabetes Center and assisted other programs in the state in this process.
Diabetes Initiative of South Carolina
Surveillance Council
Annual Report
January 1, 2005 – December 31, 2005 (Year 11)

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.
  - Develop, establish and maintain a registry of blind South Carolinians that identify diabetic individuals.
  - Analyze the effects of co-morbidities with diabetes.
- Establish and maintain an ongoing evaluation of the role of insurance and managed care companies in control of diabetes.
- Function as a central unit composed of multiple organizations and disciplines involved in the surveillance of diabetes in South Carolina.
- Function as a data and information resource for DSC and DCP and other organizations involved in diabetes control.
- Develop and maintain an Internet Website for distribution of information regarding diabetes in South Carolina.
- Establish a scientific forum to showcase diabetes research and projects in South Carolina.
- Establish a methodology to estimate the prevalence of diabetes in South Carolina based on clinical data.
- Establish a methodology to assess trends in diabetes-related outcomes and clinical practices.

Major Accomplishments
The summary of the major accomplishments is:

- Completion and distribution of the third 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 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.

Establishment of a 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 2005 Diabetes Symposium. Thirty-six abstracts and posters were presented with three SC students receiving cash awards.

Establishment of a working committee to identify a methodology to assess trends in clinical practices, patient behaviors and outcomes related to diabetes.

Establishment 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.

Specific accomplishments related to the DSC 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.

- Working with Carolina Medical Review, the Council has identified baseline estimates of clinical practices regarding HbA1c, microalbumin, eye examinations, foot examinations and lipid profiles.
  - Utilization of primary care was identified from the Medicaid database.

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

- Working with Carolina Medical Review, the Council has identified baseline estimates of clinical practices regarding HbA1c, microalbumin, eye examinations, foot examinations and lipid profiles.
- Diabetes data and information was reported to providers through the distribution of the second Burden report as well as via the Website.
- Information regarding diabetes in South Carolina was also distributed via Diabetes Centers of Excellence, Carolina Medical Review, DCP, and through HMOs.

Goal III: To address the needs of people at-risk and those with diabetes by increasing services and education in health professional shortage area in South Carolina.

- The Council worked with the Office of research and Statistics and Carolina Medical Review to identify areas of shortages based on providers per population.
- Areas of shortage were also identified by area of underutilization based on Medicaid and similar databases.
Goal IV: To reduce the mortality and disability rates from diabetes-related complications.
- The Council membership was expanded to include clinical specialists such as nephrology and ophthalmology in order to develop a comprehensive assessment system.
- The Council has established access to a variety of data sources including vital records, Medicaid, Medicare, hospital billing, insurance claims, and the Southeastern Kidney Council in order to establish a comprehensive data system for diabetes.
- The Council has helped establish an inventory of diabetes researchers and projects in South Carolina. The various investigators and projects will be listed on the webpage. The annual Symposium will also function as a forum for the investigators to meet and exchange ideas regarding diabetes in South Carolina.
- The Council has organized several reports and manuscripts focused on lower extremity amputations in South Carolina and associated trends that identified a possible positive effect from DSC interventions.

Goal V: To reduce the age-adjusted mortality rates from diabetes and its complications.
- The Council has identified and plotted trends in mortality associated with diabetes in a manner that can be monitored and used to predict outcomes.

Goal VI: To decrease risks for select groups of people with diabetes where the prevalence and complication rates exceed those of others.
- Maps have been generated to identify areas of excess risks of diabetes based on self-report, hospitalizations, and Medicaid.

Goal VII: To reduce preventable hospital admissions and charges for diabetes.
- The Council has developed a system of measures based on hospital billing data that assesses costs associated with hospitalizations associated with diabetes.

Goal VIII: To reduce preventable visits to the emergency room by people with diabetes.
- The Council has developed a system of measures based on hospital billing data that assesses costs associated with emergency room use due to conditions associated with diabetes.

Goal IX: To improve the statistical basis for estimating the prevalence of diabetes and diabetes-related complications in South Carolina.
- Trends in hospitalizations for cardiovascular disease with and without diabetes has been identified to estimate the burden of diabetes.
- A committee was established to identify measures that estimate prevalence based on clinical values. The committee will assess Medicare, Medicaid, insurance claims, and hospital discharges to refine the estimates currently based on self-report.
  - The Council has established a working relationship with the Southeastern Kidney Council to quantify the impact of diabetes on end-stage disease.
- The Council is working with the office-based data base of the Hypertension Initiative to determine prevalence rates and glycemic control.
DIABETES INITIATIVE OF SOUTH CAROLINA
TASK FORCE ON INTENSIVE MANAGEMENT OF DIABETES IN THE HOSPITAL
JANUARY 1, 2005 – DECEMBER 31, 2005
The current medical literature documents the need for improvement of the management of:
   a) hyperglycemia in the acutely ill hospital patient
   b) Hyperglycemia/diabetes mellitus in patients on medical/surgical hospital floors.

Moreover, the direct observation of members of the Task Force confirm that these problems are extensive and serious in South Carolina. The Task Force for the Control of Hyperglycemia in Hospitalized Patients was organized by Dr. Colwell early this year. It has met several times through the year, made presentations on the subject at the September conference . . . most recently it met in Columbia on November 2, 2005. The minutes of the meeting are attached.

The Task Force recommends approval by the SC Diabetes Initiative Board of the following proposal and that the Task Force be continued for another year.

An example of a protocol for the use of IV Regular insulin to control hyperglycemia in ICU patients has been developed and piloted by Dr. Usah Lilavivat. An example of a protocol for control of patients on medical/surgical floors or transitioning from the ICU has been developed by Dr. Ali Rizvi.

As of November 10, 2005, there were eleven hospitals in South Carolina already implementing or intending on implementing IV infusion protocols for acutely ill patients.

Presentations will be made at the SCAHA medical leadership conferences, which take place every 2 to 3 months. The SCAHA will be asked to place recommended protocols on its (newly revised) website.

A conference will be organized for the education and training of potential hospital staff champions of the policies. This conference would involve approximately 50 invitees, and would be based on presentations and workshops given by Task Force members. Inquiry has been initiated on the availability of outside funding.

The Surveillance Council would be involved in designing a database collecting historical data at each hospital, and designing a survey form which would allow measurement of the effects of intervention. The Surveillance Council will develop cost estimates and budgets for data abstraction for each hospital.

A member (or members) of the Task Force who is available on site to each hospital where the IV infusion protocol was introduced to practice. This mentor should be from the same region of the state so as to minimize time away from the mentor’s practice. The Task Force should develop, and then recommend, a mentor honorarium policy to present to the Board.

Dr. Colwell, on behalf of the DSC Board, should select a small Steering Committee of the Task Force to oversee this project. The Task Force should have scheduled meetings on the same days as the Initiative Board meeting.

Dr. Colwell and the Executive/Finance Committee of the Board should develop a budget for Task Force activities.
Governing Committee Members: Sue Haddock, PhD, Chairperson; David Keisler, MD, Associate Professor, Department of Family/Preventive Medicine; Sharm Steadman, PharmD, CDE, Professor, Department of Family/Preventive Medicine; Ali Rizvi, MD, CDE, Associate Professor, Department of Family/Preventive Medicine; Beth Mayer-Davis, RD, PhD, Professor, Arnold School of Public Health; Wanda Loftin, PhD, Associate Professor, College of Nursing; Al Pakalnis, MD, Professor, Department of Ophthalmology; Dero Myers, PhD, Faculty, Department of Neuropsychiatry; Kay McFarland, MD, Professor, USC, Department of Internal Medicine; Steven Barnett, MD; Fairfield Medical Associates, Winnsboro Elizabeth Todd Heckel, MSW, CDE, Faculty, Department of Family/Preventive Medicine

The Governing Committee is comprised of individuals who represent many of the professional disciplines integral in the education, health delivery and research fields in diabetes. This group of people has and continues to make contributions on a local, statewide, national and international level. These contributions have altered treatment options and teaching materials to undergraduate, graduate, medical school students and residents. Collaborative, funded and unfunded research continues to enhance the statewide mandate of the Diabetes Initiative of SC and the University of SC to serve as the statewide entity to oversee and improve the healthcare delivery system for people with diabetes. The following are some of the highlights of the work which these individuals have contributed.

**Statewide presentations, posters, appointments and publications:**

- **Publications**

- **Appointments**
  - Rizvi, Ali, MD, Chair, SC Chronic Disease Collaborative, Carolina Center for Medical Excellence/ Carolina Medical Review.
  - Elizabeth Todd Heckel, MSW, CDE; Diabetes Advisory Committee for American Diabetes Association Program Recognition, Lexington Medical Center and Palmetto Health Richland.
  - Sharm Steadman, PharmD, CDE; Elizabeth Todd Heckel, MSW, CDE; Chronic Disease Collaborative Team, Carolina Medical Review.
  - David Keisler, MD; Chief of Staff, Palmetto Health Richland; V-Chair, Diabetes Initiative of SC Board.
  - K. Sue Haddock, RN, PhD, member of Task Force on Intensive Management of Hospitalized Diabetic Patients.

- **Other Related Activities**
  - Ali Rizvi, MD, CDE; Elizabeth Todd Heckel, MSW, CDE; Sharm Steadman, PharmD, CDE; Department of Vocational Rehabilitation Training for counselors, July 2005.
  - Elizabeth Todd Heckel, MSW, CDE; Phil Michels, PhD; “Pre-Diabetes” Groups, January – Dec. 2005, Family Practice Center, Columbia, SC, 30 participants.
CAMP ADAM FISHER, Inc.; SC’s camp for children with diabetes, 150 participants, healthcare volunteers from across SC staff the camp.

Sharm Steadman, PharmD, CDE; Elizabeth Todd Heckel, MSW, CDE; Annual African American Conference on Diabetes, Nov. 7, 2005.

Sharm Steadman, PharmD, CDE; Elizabeth Todd Heckel, MSW, CDE; Prevention Partners, diabetes education workshops for state employees, 39 participants 2005.

Sharm Steadman, PharmD, CDE; Elizabeth Todd Heckel, MSW, CDE; Third Annual USC Diabetes Symposium; April 30, 2005; 80 participants.

National appointments and publications:

- **Appointments**
  - Beth Mayer-Davis, PhD; Board of Directors, American Diabetes Association.
  - Beth Mayer-Davis, PhD; Council on Epidemiology and Statistics, Chair; Nutrition Subcommittee for American Diabetes Association Scientific Sessions; Scientific Sessions Planning Committee; American Diabetes Association.
  - Beth Mayer-Davis, PhD; Associate Editor: Diabetes Care.
  - K. Sue Haddock, RN, PhD, Evaluator for national VA Clinical Nurse Leader Pilot.
  - K. Sue Haddock, RN, PhD, VA Liaison to AACN for national evaluation of the Clinical Nurse Leader Pilot.
  - K. Sue Haddock, RN, PhD, Member, National Nurse Research Advisory Group, Veterans Health Administration.

- **Publications**
  - Beth Mayer-Davis et al., Dietary glycemic index and glycemic load, carbohydrate and fiber intake and measures of insulin sensitivity, secretion and adiposity in the Insulin Resistance Atherosclerosis Study. *In press, Diabetes Care, August 2005*.
  - Rizvi, AA Eliminating inpatient sliding-scale insulin; a reeducation project with medical house staff. *Diabetes Care, 2005*. 
SOUTH CAROLINA DIABETES PREVENTION AND CONTROL PROGRAM
S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
JANUARY 1, 2005 – DECEMBER 31, 2005 (YEAR 11)
The SC DPCP is one of 59 states and territories funded by CDC to promote awareness, prevention, and management of diabetes. 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.

FEDERAL and STATEWIDE INITIATIVES

Performance Improvement Plan (PIP): Performance Improvement Plan Retreat Outcomes
The DPCP hosted the PIP retreat on April 8, 2005 at the South Carolina Archives and History Center. The eight participants, facilitated by Dr. Lillian Smith, were asked if there were any additions or amendments to the current recommendations that came out of the Statewide Diabetes Assessment. Four recommendations were added and the group then proceeded to go through three rounds of ranking the recommendations in terms of priority, feasibility, etc. The following is the list of the top six objectives that came out of the process that needs to be looked at for the upcoming year. The objectives that are SC DPCP led are currently written into the SC DPCP work plan and the objectives that are non SC DPCP led should be written into the statewide diabetes plan. All progress will be reported out to DSC during quarterly council and board meetings.

PIP Objective 1: To form a network of healthcare professionals to solve diabetes related health problems.

PIP Objective 2: Promote research on development and evidence-based initiatives.

PIP Objective 3: Revise DSC evaluation framework to coordinate with strategic plan.

PIP Objective 4: Increase the number of Certified Diabetes Educators (CDE) in South Carolina.

PIP Objective 5: Develop (for each county/region) a list of services and resources related to diabetes care and education.

PIP Objective 6: Develop awareness campaign to inform and educate consumers about diabetes related services and health benefits.

COMMUNITY EDUCATION

Diabetes 101 Trainings:
The SC DPCP and the State Coordinator for Diabetes Education partnered to develop a community awareness curriculum entitled “Diabetes 101” to be used as a train-the-trainer for lay health leaders across the state to deliver diabetes information to their community.

This program focuses on the risk for diabetes; promotion of awareness of diabetes, signs and symptoms; management and prevention; and addresses knowing your “ABCs”- A1c, blood pressure, and cholesterol.
The booklet is based on the ADA guidelines for diabetes self-management education and is to be used solely for group education or community presentations. All participants should be referred to healthcare providers for any questions/concerns related to medications, current symptoms and physical activity. Review of the book takes 1.5 hours – 2 hours along with discussion and group interaction. If you are interested in becoming a trainer for the Diabetes 101 community awareness program, please contact: The SC DPCP at 803-545-4471 or email Bennie Daugtry at daughtbc@dhec.sc.gov.

**South Carolina African American Conference on Diabetes:** The ninth conference was held on November 7, 2005 at the Columbia Metropolitan Convention Center in downtown Columbia, SC with over 650 participants in attendance. The conference, “Diabetes: What to Know From Head to Toe” was co-sponsored by the Diabetes Today Advisory Council (DTAC) and SC DHEC. Sessions presented at the conference included Physical Activity, Sit and Get Fit, 65 and Energized, Medications and Monitoring, Diabetes and Sexuality, How to Eat Right and Live, How to Check Your Feet. For the first time this year, a two-part session that trained participants to do diabetes awareness, prevention, and self-management sessions in their community was offered. In addition, a skit entitled, “How to Get What I Need”, was performed during the closing session between a doctor and a patient that stressed how a patient should work in conjunction with their diabetes care team and make sure they “know their numbers.” Conference evaluations are currently under review.

**IMARA Woman Magazine Partnership:** SC DPCP and the Office of Minority Health are in their third year of partnership with the IMARA Woman Magazine. The joint partnership between the three continues for the 2005 – 2006 funding year and includes sponsorship of the annual IMARA Woman Health Empowerment tour, published articles and ads, magazine distribution, and radio/TV spots.

The IMARA Health Ministry Empowerment Tour 2005 was held in Sumter, Greenwood, and Kingstree. This year’s tour featured the daughters of Malcolm X (Malikah Shabazz) and the Rev. Dr. Martin L. King, Jr. (Bernice King). The tour reached a total of 802 people across the state (366--Sumter, 247--Greenwood, and 189--Kingstree). Each stop consisted of a morning plenary featuring chair aerobics, concurrent sessions and health screenings and testing (HIV, diabetes, cholesterol, blood pressure, weight/BMI, etc) throughout the day. Each participant at the Kingstree Tour stop received a pedometer during the morning Opening Session and the participant with the highest number of steps by the Closing Session was awarded a special door prize (a DVD player). The SC DPCP sponsored the Diabetes 101: What to Know From Health to Toe!! Workshop and OMH sponsored the Reclaim Your Body workshop at each tour stop.

The January/February article/ad published in the IMARA Woman Magazine was entitled *More Than 50 Ways to Prevent Diabetes*, which was taken from a campaign from the National Diabetes Education Program. The March/April article was entitled, *Diabetes Care Plan Helps Manage Disease*. The accompanying health advertisement was on controlling your diabetes and enjoying life. OMH was responsible for the article/ad in the May/June issue, which publicized their “Count Your Steps” initiative [a campaign to get African American women between the ages of 25-65 moving in the direction of better health through beginning a walking program] while our joint ad stressed living longer, better, and losing weight. The July/August article/ad highlighted gestational diabetes and how to give a healthy start to both mom and baby. OMH also had an article featuring two of their “Count Your Steps” participants and information on how to sign up for the six-week program. The September/October article was on the Count Your Steps initiative, and encouraged women to get moving and sign up for the campaign.
The ad was for the annual *Take a Loved One for a Checkup Day*, which was on September 20, 2005. The November/December issue just came out and the article/ad is on healthy eating during the holidays.

SC DHEC was honored for the fourth year in a row with the Public Sector award during the 2005 IMARA Woman Gala held on Friday, February 18, 2005.

### STATEWIDE COALITION DEVELOPMENT

**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 05-06 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 six coalitions:

Capacity building funding in the amount of $2000
- Orangeburg Diabetes Community Coalition
- Marion County Diabetes Coalition
- Horry County Diabetes Coalition

Basic implementation funding in the amount ranging from $13,800 - $14,000
- Low Country Diabetes Initiative
- Williamsburg Diabetes Education and Control Coalition
- Catawba Diabetes Coalition

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, 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. The funding period began June 1, 2005 and will end March 29, 2006. Activities will take place at least quarterly between June 05-Mar 06.

Two new coalitions have been added to the growing list of coalitions across South Carolina, Lancaster and Berkeley County-Charleston. With the addition of these two coalitions, that brings the total to 32 coalitions across the state.

**The Fifth Annual Statewide Diabetes Coalition Meeting:** The South Carolina Diabetes Prevention and Control Program and the Diabetes Initiative of South Carolina co-sponsored the Fifth Annual Diabetes Statewide Coalition Meeting on Wednesday, September 21, 2005 from 10am – 4pm in Charleston, SC and a total of 39 coalition members attended. Mr. Nathaniel Bracey of Zion Non Profit Charter Trust, sponsored by the National Office of Minority Health Resource Center in Rockville, MD was the guest speaker. Mr. Bracey conducted a two-part workshop on “Coalition Building and Community Mobilization" and "How to Create Sustainable Programs.” The Lay Health Facilitator provided an update on the mini-grant process and answered questions that the coalitions had about submitting invoices and applying for funding next year. One of the local diabetes supply companies that have been supporting the meeting for the past five years provided lunch. Upon completion of the statewide meeting, five of the coalitions displayed their posters and Low Country Diabetes Initiative won first place for the best poster and a received a certificate and a monetary award.
The Second Annual Coalition Mid-Year Training
The SC DPCP hosted the 2nd Annual Coalition Mid-Year Training on April 6, 2005 and had 25 coalition members representing ten counties along with other agencies and community organizations represented. One of the more active coalitions had a member present an overview of their S.W.O.T. analysis as well as guiding other coalitions in completing one for their community. The SC DPCPs evaluator got rave reviews on his presentation entitled, “Getting Back to the Basic's-How to Write Measurable Goals and Objectives. The day was completed with an overview on how to complete and submit the mini-grant application, the invoice process, and a thorough explanation on why SC DHEC has the invoice process set up the way it is. Creative partnering enabled a local diabetic supply company to provide funds for both a nutritious and delicious breakfast and snack.

HEALTH SYSTEMS

Third Annual Evidence Based Training: The “3rd Annual Evidenced – Based Diabetes Management Symposium: Making a Difference in Diabetes and Cardiovascular Outcomes” was held on February 4th and 5th, 2005 at the Crown Reef Convention Center in Myrtle Beach. The SC DPCP and the CVH Division along with MUSC and DSC co-sponsored the symposium.

One hundred forty three healthcare providers from across the state of South Carolina attended the Symposium [26 MDs, 14 NPs, 44 RNs, 8 RDs 12 LPNs and 39 other disciplines]. About 78% of all the Community Health Centers in the state participated in the event. Diabetes educators, nurses, dietitians, and health educators from the health departments and Parish nurses were also in attendance. Continuing medical education credits for physicians and continuing education credits for nurses, dietitians, and social workers were provided.

Recipients of the recognition awards were as follows:

- Certified Diabetes Educator of the Year – Valerie Muehleman, RD, CDE, from Beaufort/Jasper/ Hampton Community Health Center
- Community Health Center of the Year – Black River Healthcare, Inc.
- DHEC District Diabetes Educator of the Year – Katherine Brewer, RN, CDC from Catawba District
- Primary Care Provider of the Year Award (Physician/Physician’s Assistant/Nurse Practitioner) – C. Stewart Darby, Ph.D., MPAS, PA-C

Community Health Centers: 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
- Three abstracts submitted by members of the SC DPCP were selected for oral presentation at the Division of Diabetes Translation Conference, which was held in Miami, FL in May 2005. Ms. Moody presented an abstract entitled “Improving Diabetes Prevention and Control Through Community-Based Coalitions.” Ms. Wright-Mallory presented an abstract entitled “Diabetes: Not Just a Touch of Sugar… Reaching the Community Through Lay Health Conferencing”, and Ms. Davis presented an abstract entitled “Policy Changes to Assure Early Identification of Sensory Loss in Clients Feet.”

- Ms. Gwen A. Davis presented the use of the Diabetes 101 barrier survey at the AADE National Conference in Washington DC and was fortunate to meet with the author of the original survey that we used, Dr. William Polonsky, to discuss how we have adjusted his Diabetes Distress Scale for our own purpose. Dr. Polonsky requested to know more of how our work is progressing. Based on her presentation, Ms. Davis has received three contacts from other states regarding our use of the barrier survey in the community.

- A CDC E-Journal article entitled: The annual African Americans conference on diabetes: evolving program evaluation with evolving program implementation was accepted as a part of a series on evaluation in the "Preventing Chronic Disease" E-journal. Two of the four authors of the article are SC DPCP employees – Rhonda L. Hill and Jacquelyn Houston and a third is a former employee, Joel Williams.

- Mr. Yaw Boateng had the opportunity to attend the “CDC Short Course in Diabetes Public Health and Research” from October 17-22, 2005, at Emory University, Atlanta. A total of 34 participants were selected from a pool of applicants from all over the world (Brazil, India, Canada, New Zealand, Puerto Rico, Mexico, Costa Rica, and America). It was a very informative course that shed more light on the role of Translation Research in health care in general and quality of health care in particular, the importance of viewing diabetes and cardiovascular and other chronic diseases from the perspective of Public Health.
DIABETES INITIATIVE OF SOUTH CAROLINA
BOARD OF DIRECTORS AND COUNCIL MEMBERS
Diabetes Initiative of South Carolina
Board of Directors and Council Members

Board of Directors

Members

John A. Colwell, MD, PhD, CDE (Chair)  
Director, Diabetes Center, MUSC
Pamela Arnold, RN, MSN, CDE  
Diabetes Center, MUSC
John Bruch, MD  
Greenville Hospital System
Melanie “BZ” Giese, RN  
Bureau Chief, SC DHHS
Elizabeth Todd Heckel, MSW, CDE  
USC/DSC Site, University of SC
Carolyn Jenkins, DrPH, APRN, RD, CDE  
Outreach Council, MUSC
David Keisler, MD  
SC Academy of Family Physicians
Arthur Kennedy, MD  
SC Governor’s Office
Daniel Lackland, DrPH  
Epidemiology/Biometry, MUSC
Usah Lilavivat, MD  
Internal Medicine
Elizabeth Mayer-Davis, PhD  
USC School of Public Health
Ronald Mayfield, MD  
Endocrinology, Spartanburg
Edi McNinch, RN, CDE  
SC DHEC, Laurens County Home Health Services
Al Pakalnis, MD  
University of SC, Ophthalmology
William Price, MD  
Internal Medicine/ Endocrinology
Ali Rizvi, MD  
Endocrinology, USC
George Rosebrock, MD, CDE  
ADA – Southern Carolina Area
Gardenia Ruff, MSW, LISW  
SC DHEC – Minority Health
Kenneth Trogdon  
Commun-I-Care
Lisa Waddell, MD, MPH  
SCDCP, SC DHEC

Advisory Members

Edwin Bransome, MD  
Internal Medicine/ Endocrinology
Brent Egan, MD  
Hypertension Initiative of SC
David Garr, M.D.  
SC AHEC
Nelson Gunter, MD  
Carolina Medical Review
Rhonda Hill, PhD, CHES  
SC DHEC, DCPCP
Bryon Jackson, DPM  
Diag. & Comprehen. Foot Care

Ex-Officio Members

Yaw Boateng, RD, MPH, MS  
SC DHEC/DCP
James Edwards, DMD  
MUSC – Past President
Stephen Smith  
ADA – Past Board Chair
# Diabetes Center Council

## Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Pamela Arnold, MSN, APRN, BC-ADM, CDE</td>
<td>Diabetes Center, MUSC</td>
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<tr>
<td>Kathie Hermayer, MD</td>
<td>Endocrinology, MUSC</td>
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<tr>
<td>Carolyn Jenkins, Dr.PH, APRN, RD, CDE</td>
<td>Outreach Council, MUSC</td>
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<tr>
<td>Ronald Mayfield, MD</td>
<td>Endocrinology, Spartanburg</td>
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<tr>
<td>Jane Parker, PNP, APRN, BC-ADM, CDE</td>
<td>EDIC/IDEAL, MUSC</td>
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<tr>
<td>Denise Wood, MSN, APRN, BC-ADM, CDE</td>
<td>EDIC/IDEAL/GOKIND, MUSC</td>
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## Ex-Officio Member

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>John A. Colwell, MD, PhD, CDE</td>
<td>Director, Diabetes Center, MUSC</td>
</tr>
</tbody>
</table>
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Intensive Management of Hospitalized Diabetic Patients
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