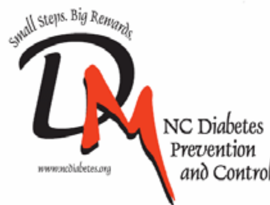
# DIRECT Solutions *for* Diabetes Control

***Diabetes self-management reaching persons not served in traditional health settings***

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## Executive Summary

In Wake County, over 35,000 adults have been diagnosed with diabetes and the incidence of diabetes is escalating. Diabetes is more common in ethnic minorities and persons of lower socioeconomic status. In 2001, diabetes was a contributing factor in 145,000 hospitalizations. Hospital treatment for patients with diabetes was over $2 billion.

Healthcare insurance coverage and diabetes management classes for the Wake County residents are inadequate. Of residents responding to the 2004 Behavioral Risk Factor Surveillance System (BRFSS) survey, 16.7% reported having no healthcare coverage. Those with diabetes, 43.7% reported never having attended a diabetes education class or management training.

Considering these factors, the need for a diabetes management center targeting minorities, the underserved and hard to reach populations, who historically do not enroll in training programs in traditional health care settings, was evident. Opening an American Diabetes Association (ADA) approved Education Recognition Program would assure the delivery of diabetes management training following standard health care guidelines.

Project DIRECT (Diabetes Interventions Reaching and Educating Communities Together) is a trusted community-based organization that addresses the prevention of diabetes and its complications. DIRECT is funded by the NC Division o f Public Health (DPH). Initially, the project was designed to address diabetes among African Americans. DIRECT is located in Southeast Raleigh and is part of Wake County Human Services (WCHS).

WCHS is the consolidation of programs and services formerly carried out by Social Services, Public Health, Mental Health, Job Training, Child Support, Housing, and Transportation. The agency has a history of engagement to eliminate racial and ethnic disparities in health.

DIRECT Solutions for Diabetes Control (DSDC) is a diabetes self-management initiative developed by staff and volunteers working with Project DIRECT. In 2007, DIRECT will initiate DSDC through a partnership with DPH. DPH will apply for approval as an ADA Education Recognition Program. DSDC will serve as a satellite diabetes self-management program under DPH. DSDC will then be eligible for third party reimbursements from insurance companies including Medicare and Medicaid.

DSDC's emphasis on community involvement and alliances makes it unique. Volunteers (who successfully complete a diabetes self-management program) will serve as mentors and supporters. DSDC will focus on three measurable objectives:

- Decrease number of inpatient hospital days
- Decrease emergency room visits
- Improve laboratory values (e.g., Hemoglobin A1c)

Strengthening The Black Family, Inc. (STBF) will operate DSDC through a contract with WCHS.

## Definition of Plan

DSDC will develop, market, and implement an ADA Education Recognition Program based on the May 2000 National Standards for Diabetes Self-Management Education. Services will be provided at the Project DIRECT office, a community setting familiar to the target population. Services will include: a comprehensive plan for self-management, nutrition management, physical activity, blood glucose monitoring, high-risk behavior reduction, education, referral and goal setting for the targeted population. Service provision will be enhanced by the inclusion and involvement of selected community volunteers, who have participated successfully in the program and can serve as mentors and supporters. DSDC will capitalize on the lessons learned from the success of Project DIRECT's community-based model of service delivery. As the largest community-based diabetes project in the United States funded by the Centers for Disease Control and Prevention's (CDC), Project DIRECT has been able to implement strategies distinctive from more traditional clinical model approaches. The emphasis on community involvement and community alliances is what makes DSCS approach unique.

Project DIRECT is located in Southeast Raleigh and was initially designed to test a comprehensive approach for addressing diabetes among African Americans. Project DIRECT, a part of WCHS, is funded via a grant to the NC Department of Health and Human Services (DHHS). DHHS has a contractual agreement with WCHS to institutionalize the project. Project DIRECT includes programs to address all three levels of diabetes prevention: health promotion, outreach, and diabetes care.

There are other ADA programs in Wake County; however their primary focus is insured clients. The client focus for DSDC is Wake County residents with diabetes that are:

- African American or Latino
- Recipients of Medicare and Medicaid
- Uninsured

The first year of the business plan timeline will involve planning and development. Three months will be used to strategically align the plan with DPH. In the final nine months, DSDC will develop a client base through the federally funded community health clinics, the free clinics and local health care providers. This period will also include implementing the National Standards and applying for ADA recognition. ADA recognition can be submitted only after operating in a manner that meets all application criteria for at least six (6) months. Revenues will be generated in year 2 upon receiving ADA recognition. DSDC will be eligible for third party reimbursements from insurance companies including Medicare and Medicaid. DSDC will serve at total of 14 clients per month beginning in year 2 and 20, 25 and 30 respectively in years 3-5.

The primary rationale for developing DSDC is to provide a service to an underserved and hard to reach population. A key stakeholder is the Community Care Program of Wake and Johnston Counties (CCWJ). CCWJ has created private and public partnerships to improve the management and delivery of care for Carolina Access Medicaid recipients. DSDC services will be strategically aligned to meet the diabetes educational needs of the CCWJ clients as well to include a broader base of underserved and uninsured clients.

Underserved and hard to reach populations have historically not enrolled in training programs offered in traditional health care settings. Services provided by DSDC will include:

- Diabetes self-management education
- Nutrition education and management
- High-risk behavior reduction
- Physical activity instruction
- Blood glucose monitoring
- Support and referral services
- Goal setting

DSDC will focus on improving the quality of diabetes management in a Wake County targeted population through the following three measurable objectives:

- Decreased number of inpatient hospital days
- Decreased emergency room visits
- Improve laboratory values (e.g., Hemoglobin A1c)

DSDC will achieve the objectives above through the following strategies:

- Strategically align with DPH.
- Implement a diabetes management plan using the National Standards for Diabetes Self-Management.
- Operate in a manner that meets all requirements for ADA Education Program Recognition.
- Apply and receive ADA Education Program Recognition.
- Adopt a culturally sensitive curriculum with measurable learning objectives based on the ten content areas of the National Standards.
- Implement a participant education records system that documents individualized assessments related to the National Standards content areas, education plans with learning and behavioral objectives, interventions, evaluations, and staff collaboration.
- Track participants' behavioral goals, program outcomes, and a formal continuous quality improvement (CQI) process to evaluate the effectiveness of the diabetes education services.
- Build on existing community-based, faith-based and business relationships to market and provide outreach for the program. Partnerships will be enhanced with local medical providers to develop a client base.

## Industry Analysis

The health care industry is the nation's second-largest employer. The structure of the public and community health industry is not easy to define. It includes a population-based approach versus a personal or individual health care model. Public health focuses on prevention as a primary strategy for improving health and quality of life. Among government agencies, the responsibility for the health of the country is divided among the federal, state, and local entities. DSDC will operate under a local public health agency, WCHS, which is responsible for the health of Wake County residents.

Current industry trends support the development of community based education programs, like DSDC. The US Department of Health & Human Services' "Healthy People 2010", explains that:

- Communities experiencing the most success in addressing health and quality-of-life issues involved many components of their community.
- Communities eager to improve the health of specific at-risk groups are more likely to be successful if they work collaboratively with their communities and if the social and physical environments are conducive to supporting healthy changes.
- More effective community health promotion programs implement comprehensive intervention plans with multiple intervention strategies (such as education, policy, and environmental changes) within various settings, such as the community.

The ADA surveyed 389 health providers and administrators about the barriers they faced delivering diabetes care. Providers indicated a need to enhance behavioral change in patients with diabetes. All providers were more confident in their ability to instruct patients on diet and exercise than on their ability to help them make behavioral changes.

The 2005 International Diabetes Federation reported an economic benefit to self-management training programs through reduced hospitalizations and reduced A1c levels. The Diabetes Control and Complication Trial (DCCT), the United Kingdom Prospective Diabetes Study (UKPDS) and the Diabetes Prevention Program (DPP) demonstrate the cost effectiveness of self-management and diabetes education.

The CDC Task Force on Community Preventive Services recommends the following evidence based findings of success in diabetes care management:

- Diabetes self-management education in community gathering settings
- Community-wide campaigns and point-of-decision prompts to encourage use of stairs
- Social support interventions in community settings
- Increasing physical activity by using environmental and policy approaches

Evidence was not found on the economics of establishing a diabetes education program in the community. However, the use of preventative care programs is growing, as is the use of employee education programs aimed at better managing the effects of diseases such as diabetes. These employer programs aim to reduce employee illnesses, and thereby reduce costs.

Questions still exist on the cost of diabetes self-management education programs and who will pay for it. DSDC hopes to fill a portion of the gap by demonstrating that a

community-based diabetes self-management education and support program can be cost effective and serve as a model program for people with Type 2 diabetes.

## Target Market

In Wake County, NC, diabetes is a growing burden. With increases in both the geriatric population and rates of obesity, the incidence of diabetes is also increasing. Diabetes can lead to serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications. Type 2 diabetes, which accounts for 90-95% of all diabetes cases, is linked to obesity, lack of physical activity, unhealthy eating and smoking. Furthermore, diabetes is more common in ethnic minorities (African Americans, Native Americans and Latinos) and persons of lower socioeconomic status. (Wake County Community Assessment, 2002)

In 2001, diabetes was cited as being directly responsible for more than 14,000 hospitalizations in NC and as a contributing factor in an additional 145,000 hospital admissions. Hospital treatment for patients with diabetes in NC totaled over $2 billion in 2001. (DHHS, DPH, State Center for Health Statistics, SCHS, 2003) Diabetes hospitalization costs are approximately $202 dollars per NC resident per year (SCHS, 1998). In Wake County, the annual hospitalization charge for diabetes is over $100 million and the annual hospital charge is $160 per Wake County resident. (Wake County Community Assessment, 2002)

Over 35,000 Wake County adults have been diagnosed with diabetes. (SCHS, Behavioral Risk Factor Surveillance System, BRFSS, 2003) The true prevalence of diabetes may be as much as 50% higher because of undiagnosed cases of Type 2 diabetes. It is estimated that over 10,000 Wake County residents are living with undiagnosed diabetes (Wake County Community Assessment, 2002). In 1993, the Research Triangle Institute conducted a pilot survey in Wake County. The results showed that the rate of diabetes was double in African Americans as compared to whites and that undiagnosed diabetes was found five times as often. Data on diabetes prevalence for Latinos in Wake County and NC were not available. However, in national surveys, Latinos have 2-3 times higher prevalence than white adults. (Bell, Wake Forest University, unpublished)

Pertinent to the health status of Wake County is the socioeconomic condition. Poverty and lack of access to healthcare are two major factors. In Wake County, African Americans comprise 20.5% of the population and Latinos make up 7.1%. (SCHS, 2003) The 2000 Census reported that 22% of all North Carolinians are African American, that 22.9% of African-American North Carolinians live in poverty and 20% have no health care coverage.

Healthcare insurance coverage and diabetes management classes for the targeted groups are inadequate. Of 2004 BRFSS respondents in Wake County, 16.7% reported having no healthcare coverage. For individuals with diabetes in Wake County, 43.7% reported

never having attended a diabetes education class or management training. In addition, 44.8% of respondents in Wake County had never been screened for diabetes. (SCHS, 2004)

With the burden of diabetes and health disparities on the rise and lack of sufficient diabetes management resources available to serve the increasing number of underserved and hard to reach populations, the need for an additional satellite diabetes management center in Wake County is evident. Failure to offer this service is likely to result in increased health disparities, chronic disease complications and even less frequent access to care for the targeted groups. DSDC will target the 15,295 adults living in Wake County diagnosed with diabetes who have never attended a diabetes education class or management training. Of the 15,295 adults DSDC will serve 56.

## Competitors/Partners

The majority of DSDC clientele will be primarily those who are Medicaid, Medicare, uninsured and/or underinsured. Most service providers in the same business such as hospitals and drug stores target clients who have insurance, can afford co-payments and are minimum payment risks. Other competitors providing similar or same services as DSDC are the free clinics, federally funded community health clinics and local health services. These services are already overburdened by the increasing number of patient referrals and are unable to meet excessive demands on their programs and facilities.

Specifically, potential competitors may be WakeMed Hospital, Rex Healthcare - Duke Health Raleigh Hospital and Kerr Drug/Kerr Health Care Center. Competitors offering free clinics include Wake Health Services, Inc., The Open Door Clinic, and CCWJ.

As DSDC is able to reduce inpatient hospital stays and decrease emergency room visits, potential competitors such as "for profit" hospitals may in effect become supporters rather than competitors. This is expected to result in a more cost effective means of addressing this major health problem DSCS will become an additional needed referral source for the more than 15,000 adults with diabetes living in Wake County, who have never attended a diabetes class or management program.

The four major partners or "strategic alliances" for the successful implementation of this business plan to provide diabetes self management education and training to the African-American and Latino populations of Wake County are:

- Division of Public Health (DPH)
- Wake County Human Services (WCHS)
- Project DIRECT under Strengthening The Black Family, Inc. (STBF)
- El Pueblo, Inc.

DPH will serve as the umbrella ADA recognized program for DSDC enabling Medicare, Medicaid and other insurance reimbursement for eligible clients served by the plan. The state recognized the need to expand services in this area as currently there are only five ADA recognized local health departments in NC. None of these are in central NC where

there is high density of population and a number of urban centers. Inclusion of DSDC as one of five proposed multi-site locations in the state, and specifically in Wake County, will facilitate increased access for people with diabetes to self-management education and training.

WCHS and STBF, through a contractual relationship, will provide staff, major oversight and advisory input for the plan's direction.

El Pueblo, Inc., an advocacy and leadership organization for Latinos, will disseminate information to the Latino population about the program. Also, representatives from El Pueblo will help DIRECT staff modify the project to meet the needs of the Latino population.

Opportunities to engage national, state and local collaboration and partnerships are included in the plan. At the national level, this will include the CDC, the AMA and the American Association of Diabetes Educators (AADE). At the state level, partnerships with offices within DHHS including Medicare, Medicaid and Minority Health will be sought. Other partners essential to the successful implementation of the plan at the local level are faith-based organizations that have sponsored and will continue to sponsor training for their members, physicians who serve as referral sources, and pharmaceutical companies. Cooperative relations and partnership opportunities with organizations providing similar or same services, such as The Open Door Clinic, Wake Health Services, etc. will be maintained. DSDC will use its leverage with these groups to promote innovative, creative strategies for diabetes education and self-management.

## Marketing Strategy

The increased incidence of diabetes in Southeast Raleigh, NC amongst the Medicaid and Medicare residents has made it necessary to bolster resources within the community. Chronic disease in the uninsured requires that public health providers focus efforts on educating Southeast Raleigh residents to understand and manage their diabetes rather than just treating
the disease.

The goals of DSDC marketing are to:

- Recruit recipients of Medicare, Medicaid or those who are uninsured to participate in the program.
- Educate clients on lifestyle modification (e.g., incorporating exercise into their daily routine, developing better eating habits and managing their diabetes, etc.).
- Reduce the incidence of diabetes for the families of DSDC clients.
- Provide access to services by being conveniently located in the Southeast Raleigh community.
- Partner with local physicians and public health professionals to develop a client referral base.

DSDC social marketing efforts to public health professionals, health care providers and persons with diabetes will include the following messages:

> ***"Take Home Message"***
> Clients participating in DSDC will experience better health and receive training needed to properly and successfully manage his/her diabetes long-term.
>
> ***Campaign Slogan***
> "DSDC is the program you need to effectively and forever manage your or your loved ones diabetes."

Additional client recruitment efforts and marketing tools will include the following:

- Attend Grand Rounds at Wake Medical Center in order to reach a large number of local healthcare providers (e.g., physicians and public health professionals), which are expected to serve as a client referral base. The DSDC team plans to discuss the program with the local healthcare providers by inviting them to luncheons and sharing the goals of the program.

- Work with DSDC partners (e.g., local pharmacies, area church health committees, previous program participants, etc.), who will help will play a vital role by directly or indirectly referring participants to the DSDC program and providing program information to potential program participants.

The above two bullets will ensure that the total well-being of each client is addressed and
followed, as well as, reach more residents in the Southeast Raleigh community.

- DSDC will also advertise the program using local media (e.g., radio stations that serve both English and Spanish-speaking markets, public television stations, websites, frequently visited community sites). Radio and newspaper ads (e.g., Raleigh News & Observer and The Carolinian) will be placed. Public service announcements will be issued. Flyers will be posted in grocery stores, pharmacies, local physician offices, area churches and recreation centers. Announcements will be placed on the websites of partnering agencies.

Healthcare insurance coverage and diabetes management classes for the targeted groups are inadequate. Of 2004 BRFSS respondents in Wake County, 16.7% reported having no healthcare coverage. For individuals with diabetes in Wake County, 43.7% reported never having attended a diabetes education class or management training. In addition, 44.8% of respondents in Wake County had never been screened for diabetes. (SCHS, 2004) DSDC will reach the target market through the following mediums:

| Medium | Expected Reach |
|---|---|
| | |

| | |
|---|---|
| Grand rounds | 2 per year 50 care providers |
| Community Organization | 40 Community-based Organizations per year |
| Churches | 50 Church Congregations per year |
| Radio | 30,000 |
| Television | 500,000 |
| Web sites | 100,000 |
| Newspapers (African American) | 5,000 |
| Newspapers (mainstream) | 400,000 |
| PSA's | 75,000 |
| Flyers | 2,000 |

## Project Operations and Management

***Operations***

One advantage of DSDC is its location in the community where clients live, Southeast Raleigh. It is near the downtown district accessible by public transportation. Classes will be held in the Project DIRECT conference room.

The general office hours of Project DIRECT are 8:15 am to 5:30 pm, Monday through Friday. However, most services are provided at night and on the weekend. Based on past experiences Diabetes Self-Management Classes will be offered on Saturdays and evenings.

DSDC will use existing community-based, faith-based and business partners to provide outreach for the program. DSDC will provide diabetes education to patients who self-referred or who are referred by their physicians. DSDC will use existing Project DIRECT participant's list to help identify clients. The Diabetes Coordinator will use information sessions, such as Grand Rounds or other educational settings, to encourage client referrals from local medical providers. Volunteers, who have successfully completed Project DIRECT programs, will be asked to provide community outreach and support.

The Self-Management Program is a series of classes that meet once a week for 3 weeks. Each class will last 3 hours. There will be 12 classes per year. Topics will include:

- Blood Glucose Testing and Control
- Eating for Good Health
- Dealing with Stress
- Managing Sick Days
- Exercise
- Medications
- Eating Away From Home
- Saving your Teeth
- Community Resources

- Diabetes Complications
- Keeping your Feet and Skin Healthy
- Setting Goals
- Meal Plans

The following data forms will be collected:
- Patient Information Form
- Education Record
- Behavioral Goals and Follow-up
- Gestational Education Record
- Gestational Assessment
- Physician Prescription Form

DPH will apply to the ADA to become a recognized program. WCHS will partner with DPH to be one of five local health departments to operate a satellite site. WCHS will contract with STBF to manage the DSDC education program. Application for ADA recognition can only be submitted after DPH and DSDC have operated in a manner meeting all application criteria for at least six (6) months.

DPH will:
- Serve as the sponsoring organization for this initiative.
- Employ the Instructional Team (IT) to consist of a Registered Nurse (RN) and a Registered Dietitian (RD).
- Appoint the Diabetes Nursing Consultant (RN) as the program coordinator.
- Train local health department staff in the use of the NC Diabetes Self Management Curriculum as a model for diabetes self management education classes. The IT will lead the training.
- Identify key stakeholders and convene an Advisory Council.
- Ensure the Advisory Council meets at least annually to plan and review diabetes self-management education at all sites of the program.
- Provide copies of the NC Diabetes Self-Management Curriculum to DSDC.
- Pay the application fee ($1100 for DPH and $100 for each 'multi-site' included in the application).

DSDC will:
- Provide Instructional Staff (IS) that includes at least 2 health care professionals from at least 2 different health care disciplines who have continuing education and experience in both diabetes and behavioral teaching/counseling skills. This may include Behaviorist, Exercise Physiologist, Pharmacist, Physician, Physician's Assistant, Podiatrist, RN, RD, Social Worker. IS do not need to be Certified Diabetes Educators (CDE).
- Ensure IS have a minimum of 15 hours of continuing education in diabetes-specific, diabetes-related, education or psychosocial topics. Continuing Education (CE) units must be obtained within one year prior to the application date.

- IS will perform the assessment, educational intervention, evaluation and follow up with the program participants.
- Maintain participant education records that document individualized assessment related to National Standards content areas, education plan with learning and behavioral objectives, interventions, evaluations and staff collaboration.
- Track participants' behavioral goals and program outcomes.
- Provide a Continuous Quality Improvement (CQI) process to evaluate the effectiveness of the diabetes education services.
- Provide diabetes education services at a permanent address/location.
- Have a minimum of 15 participants during the data period.
- Serve on the Advisory Council, participate in creation of the Annual Plan and the Annual Review.
- Provide copies of diplomas, license and/or registration cards for Instructional Staff.
- Provide official documentation of continuing education for Instructional Staff members.
- Provide resources and support for IS to attend meetings and trainings as necessary to meet the requirements of the program.

After recognition is granted, DSDC will begin generating revenue to sustain the program through reimbursements from third party payers such as Medicare, Medicaid and private insurers.

Clients will need to provide the following information:

- Employer's name
- Number of people in home
- Household income
- Type of insurance (clients must bring insurance, Medicaid or Medicare card)
- Pre-certification number from physician (if required by insurance company)

In an effort to reduce insulin resistance, focus will be placed on increasing physical activity by providing free, conveniently located walking programs for members of the Diabetes Self-Management Classes through an existing Project DIRECT intervention, Ready Set Walk. Ready Set Walk is the program developed by Project DIRECT to assure a comprehensive and effective approach to implementing community-based walking programs. The class is taught by an exercise facilitator once a week for six (6) weeks. Session titles are listed below:

Session 1 - Getting Started with Ready Set Walk
Session 2 - Overcoming Barriers to Walking
Session 3 - Combining Walking with Healthy Eating
Session 4 - Ready Set Walk: For Life!
Session 5 - Review Session
Session 6 - Introduction to Lay Exercise Leader Program

Most of the materials needed to teach classes already exist from the Project DIRECT Diabetes Self-Management Classes that have been taught over the past eight (8) years.

Additional materials will be purchased from the ADA and AADE. DPH will provide some educational materials at no cost.

***Human Resources***

The Management Team will include the:

- Executive Director
- Program Manger
- Administrative Assistant

The Instructional Staff (IS) will include the:

- Certified Diabetes Educator/Site Coordinator
- Contract Instructional Registered Dietitian
- Resource Staff (as needed)

***Partner Roles***

The role of each partner is briefly described below:

- DPH will apply to the ADA to become an "umbrella" recognized program to provide diabetes self-management education. DPH will then partner with WCHS and four other local health departments as a "multi-site" under the umbrella recognition. Billing for Medicaid, Medicare and private insurers for the self-management training will be carried out through this relationship.
- WCHS and STBF, through a contractual relationship, will provide staff, major oversight and advisory input for the plan's direction.
- El Pueblo, Inc., an advocacy and leadership organization for Latinos, will disseminate information to the Latino population about the program. Also, representatives from El Pueblo will help DIRECT staff modify the project to meet the needs of the Latino population.

***Outcome Measurement***

DSDC services are designed to result in three measurable objectives for the targeted groups attending classes:

- Decrease the number of inpatient hospital days by 30% within 12 months,
- Decrease the number of emergency room visits by 50% within 12 months, and
- Improve laboratory values (e.g., Hemoglobin A1C below 7 in 50% of the clients within 12 months).

The success of DSDC will track the following process measures for **year 2**, which are anticipated to improve the quality of diabetes management in Wake County.

- 168 participants will be enrolled in DSDC
- 80% of healthcare providers and participants will provide programmatic feedback.
- 240 referrals will be received.
- 50 % 0f participants will complete at least 2 services.
- 60 % of participation will complete all 3 ADA Diabetes-Self Management Classes

The impact of DSDC services will be determined by the following additional indices:

- Efficiency in the services provided
- Continuous health improvement of patients being served in Wake County
- Distribution of clients referred to the program from the target population by healthcare providers
- Number of Wake County residents reached
- Effectiveness of interventions
- Number of participants that utilize / incorporate interventions taught into their daily lives
- Number of participants that manage their diabetes effectively
- Input of professional healthcare providers
- Collaboration with the professional healthcare providers
- Collaboration with program partners
- Individual impact as noted in both pre- and post-program participation assessments completed by each client.. Assessments will focus on changes in participant's daily activities (e.g., increased exercise and better nutritional selections, etc.)
- Any changes/impact on client's quality of life

***Quality Improvement***

DSCD will use a continuous quality improvement (CQI) process/plan that will be a cyclic series of steps designed to enhance Diabetes Self-Management Education processes leading to improved outcomes for participants. Steps to assure quality improvement include:

- Identifying opportunities for improvement
- Collecting data
- Analyzing data
- Choosing a new approach based on data analysis
- Developing concepts and processes for change
- Implementing processes
- Collecting data after implementing new approaches
- Analysis of new data collected
- Evaluation of new processes

***Information Systems***

An ACCESS Database will be used to track and analyze participant data, follow-up rates and other relevant data. Reports will be generated on:

- Follow-up rates at three, six, twelve and eighteen month intervals
- Client participation and attendance
- Policies relevant to program operations

***Agency Culture***

WCHS is the consolidation of Wake County programs and services formerly carried out by several separate departments and offices: Social Services, Public Health, Mental Health, Job Training, Child Support, Housing, and Transportation. The agency employs more than 1,700 part-time and full-time employees or 52 percent of Wake County government's staff. WCHS serves clients at 27 locations and provides support for consumers through 82 agency services. In fiscal year 2005-06, WCHS' budget totaled $217 million.

The department's mission includes moving families toward economic self-sufficiency; providing quality health services, and working with the community on problems such as communicable diseases, substance abuse and sufficient foster care. At the same time WCHS provides services required by federal and state laws.

WCHS is committed to increasing public and staff awareness of the causes of racial and ethnic disparities in health outcomes. Through many advisory groups and policy making boards, including Project DIRECT's Executive Committee and STBF, they have redesigned traditional business practices and service delivery to achieve equitable outcomes. WCHS is a state leader in demonstrating effective community partnerships to meet the needs and fill gaps in services. . WCHS embraces diversity, treats clients with dignity, respect, and compassion. Their commitment has been shown through a shift in funding to include more nontraditional contractual arrangements. In FY 2005-06, over $40 million was dedicated to providing contracted services through more than 300 community providers.

The agency has a strong history and culture of engagement, including work with private industry, government, community and faith-based partners to create initiatives and realign policies to eliminate racial and ethnic disparities in health. It strives for excellence through collaborative team efforts and employee empowerment, encouraging staff to speak up, offer ideas and cause change.

DSDC is one partnership initiative of WCHS. DSDC will be operated by STBF through a contract with WCHS. DSDC will adopt the same general culture as WCHS.

## Implementation Plan and Timeline

| Time Frame | Activities |
|---|---|
| January-March 2008 | • Formalize partnership with DPH to become a satellite ADA recognized program. |
| March-April 2008 | • Identify and hire a qualified DSDC coordinator.<br>• Establish an advisory team that annually plans and evaluates the services, and reviews the participants' outcomes. |
| April-May 2008 | • Contract with a RD and RN skilled in the areas of diabetes and behavioral teaching/counseling (or certified as a |

| | |
|---|---|
| | diabetes educator). |
| May-July 2008 | • Develop a written curriculum with measurable learning objectives for the DSDC management program.<br>• Develop teaching models and training materials.<br>• Develop participation forms and program evaluation forms.<br>• Train contracted staff on program materials. |
| July-December 2008 | • Recruit 10 Faith-based Organizations to participate.<br>• Recruit 30 Community-based Organizations to participate.<br>• Recruit 20 physician offices to participate. |
| January 2009 | • Begin the DSDC management program. |

## Risk and Exit Plan

DSDC will involve physical activity through the walking program. Physical activity can put an individual at risk for injury, illness, etc. Safe practices will be a priority and each participant before involvement in the walking program will sign liability waivers. It will be encouraged that participants get medical clearance from their private doctor and forms will be provided, however it is the individual's responsibility to follow through with getting approval.

Compliance and commitment to the program is another possible risk. If individuals drop out of the program and we are unable to bill Medicare and Medicaid recipients, we will open the program to more privately insured individuals.

Meeting the National Standards for Diabetes Self Management Education Programs in order to become ADA recognized is another challenge for DSDC. DSDC plans to build relationships with local physicians and WCHS offices to create a referral network to establish patient clientele for the program.

Loss of funding from WCHS as well as from CDC is another risk. If monies are decreased or lost, DSDC plans to write grants to support the programs needs.

DSDC hopes to become a self-sustaining program in the future. We hope that years one though four will build the program and establish necessary partners and relationships in order to make the program successful. It is our plan that by year five the program will have a strong enough client base to support the program. It is also our plan to become a model "community based diabetes self-management program" that can be replicated in other counties.

## Financial Resources

In 2007, DPH will apply for approval as an American Diabetes Association (ADA) Education Recognition Program. Under DPH, DSDC will serve as a satellite diabetes

self-management program. Together, DPH and Project DIRECT will provide resources for DSDC services. According to ADA accreditation standards, DPH, as an ADA recognized sponsoring organization, is required to have a diabetes coordinator, a registered dietitian (RD) and a registered nurse (RN). Revenues will be generated in the second year, upon receiving ADA recognition. DSDC will be eligible for third party reimbursements from insurance companies including Medicare and Medicaid. Uninsured clients are reflected as negative revenue.

Our financials statement will show that fee-for-service revenue will sustain our staff operations within the next five years. Many of the financial projections included in this section of our plan are based on information provided by other successful programs within other Health Departments in NC. Key budget assumptions, including number of classes per month and class sizes are also based on the experience of similar programs within other Health Departments in NC.

*Key Budget Assumptions*

Start-up funding for DSDC will be provided through DPH to WCHS and in-kind overhead (rent and utilities) from WCHS. Wake County Human Service will subcontract with Strengthening the Black Family, Inc to administer the Diabetes Self-Management Program. Year 1 of the program will be used for start-up, developing a client base and meeting the National Standard and applying and receiving ADA recognition. DSDC will also approach existing partners such as Wake Health Services, Inc., a federal community health center, to develop new strategic alignments that would generate funds that could help off set the funding from DPH.

During our first year DSDC will be dependent upon start-up funds for personnel and operations of $54,858 from the Project DIRECT funds provided by DPH to WCHS for Diabetes Care. WCHS will provide in-kind rent and utilities projected at $15,000. The first year budget is projected at $71,858.

Our key budget assumption is the projected number of services we can expect to provide in a calendar year. The Self-Management Program is a series of classes that meet once a week for 3 weeks. Each class will last 3 hours. There will be 12 classes per year. During the second year we expect third party reimbursements from Medicare (7 @$368), Medicaid (3 @396), Insured (2 @ $355) and Uninsured at (2 @ $-355) for 12 months. We have built in a 2-month delay in receiving reimbursements. The following are the expected class attendance for years 2-5 by third party payee.

| Monthly Class Attendance Projections | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|
| | | | | |
| Medicare ($368) | 7 | 9 | 10 | 12 |
| Medicaid ($396) | 3 | 5 | 7 | 10 |

| | | | | |
|---|---|---|---|---|
| Insured ($355) | 2 | 3 | 4 | 4 |
| Uninsured at ($-355) | 2 | 3 | 4 | 4 |
| Total | 14 | 20 | 25 | 30 |

The expected annual revenues are $114,753 in Year 2,  $$111,303 in Year 3 and 4, and $115,512 in Year 5. The cash flow statement below shows that we can expect to sustain our operations with a fund balance of approximately $4,209 after five years of operations.

## *Income Statement*

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Total Expenditures | $71,858 | $114,753 | $111,303 | $111,303 | $111,303 |
| Total Revenues | $71,858 | $114,753 | $111,303 | $$111,303 | $115,512 |
| Profit | $0 | $0 | $0 | $0 | $4,209 |

Year 1 Expenditures and Revenues

| Expenditures | Jan-08 | Feb-08 | Mar-08 | Apr-08 | May-08 | Jun-08 | Jul-08 | Aug-08 | Sep-08 | Oct-08 | Nov-08 | Dec-08 | Year 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Certified Diabetes Educator/Coordinator (RN) 50% | | | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $2,083 | $20,833 |
| Contract Instructional RD 25% | | | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $1,042 | $10,417 |
| Executive Director 5% | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $250 | $3,000 |
| Program Manager 10% | $425 | $425 | $215 | $215 | $215 | $215 | $215 | $215 | $215 | $215 | $215 | $215 | $3,003 |
| Administrative Assistant 20% | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $470 | $5,640 |
| | | | | | | | | | | | | | |
| Fringes (23%) | $263 | $263 | $934 | $934 | $934 | $934 | $934 | $934 | $934 | $934 | $934 | $934 | $9,865 |
| ADA Education Recognition application | | | | | | | | | | | | | $0 |
| Resource materials | | | | $200 | | | | | | | | | $200 |
| Travel | | | $800 | | | | | $600 | | | | | $1,400 |
| Advertisement | | | $125 | | | $125 | | | $125 | | | $125 | $500 |
| Rent In-kind | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $13,000 |
| Electricity In-kind | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $1,500 |
| Telephones In-kind | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $500 |
| Computer In-kind | | $2,000 | | | | | | | | | | | $2,000 |
| **Total Expenditures** | $2,658 | $2,658 | $7,169 | $6,444 | $6,244 | $6,369 | $6,244 | $6,844 | $6,369 | $6,244 | $6,244 | $6,369 | $71,858 |

| Revenues | Jan-08 | Feb-08 | Mar-08 | Apr-08 | May-08 | Jun-08 | Jul-08 | Aug-08 | Sep-08 | Oct-08 | Nov-08 | Dec-08 | Year 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wake County contract with North Carolina DHHS Chronic Disease and Injury Prevention | $1,408 | $1,408 | $5,919 | $5,194 | $4,994 | $5,119 | $4,994 | $5,594 | $5,119 | $4,994 | $4,994 | $5,119 | $54,858 |
| Third party reimbursements Medicare (7 @$368), Medicaid (3 @396) x12 months Insured (2 @ $355) and Uninsured at (2 @ $-355) | | | | | | | | | | | | | |
| Rent - In kind | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $1,083 | $13,000 |
| Electricity In-kind | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $125 | $1,500 |
| Telephones In-kind | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $42 | $500 |
| Computer - In kind | | | | | | | | | | | | | $2,000 |
| **Total Revenues** | $2,658 | $2,658 | $7,169 | $6,444 | $6,244 | $6,369 | $6,244 | $6,844 | $6,369 | $6,244 | $6,244 | $6,369 | $71,858 |

Years 1-5 Expenditures and Revenues

| Expenditures | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Certified Diabetes Educator/Coordinator (RN) | $20,833 | $50,000 | $50,000 | $50,000 | $50,000 |
| Contract Instructional RD | $10,417 | $15,000 | $15,000 | $15,000 | $15,000 |
| Executive Director 5% | $3,000 | $3,000 | $3,000 | $3,000 | $3,000 |
| Program Manager 5% | $3,003 | $2,583 | $2,583 | $2,583 | $2,583 |
| Administrative Assistant 30% | $5,640 | $8,400 | $8,400 | $8,400 | $8,400 |
| | | | | $0 | $0 |
| Fringes (23%) | $9,865 | $18,166 | $14,716 | $14,716 | $14,716 |
| ADA Education Recognition application | $0 | | | | |
| Resource materials | $200 | $600 | $600 | $600 | $600 |
| Travel | $1,400 | $1,400 | $1,400 | $1,400 | $1,400 |
| Advertisement | $500 | $600 | $600 | $600 | $600 |
| Rent In-kind | $13,000 | $13,000 | $13,000 | $13,000 | $13,000 |
| Electricity In-kind | $1,500 | $1,500 | $1,500 | $1,500 | $1,500 |
| Telephones In-kind | $500 | $462 | $462 | $462 | $462 |
| Computer In-kind | $2,000 | $42 | $42 | $42 | $42 |
| ***Total Expenditures*** | $71,858 | $114,753 | $111,303 | $111,303 | $111,303 |

| Revenues | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Wake County contract with North Carolina DHHS Chronic Disease and Injury Prevention | $54,858 | $62,113 | $32,799 | $18,879 | $0 |
| Third party reimbursements Medicare ($368), Medicaid (396) Insured ($355) Uninsured ($-355) | | $37,640 | $63,504 | $77,424 | $100,512 |
| Rent - In kind | $13,000 | $12,996 | $13,000 | $13,000 | $13,000 |
| Electricity In-kind | $1,500 | $1,500 | $1,500 | $1,500 | $1,500 |
| Telephones In-kind | $500 | $500 | $500 | $500 | $500 |
| Computer - In kind | $2000 | | | | |
| ***Total Revenues*** | $71,858 | $114,753 | $111,303 | $$111,303 | $115,512 |