THE DEVELOPMENT OF A DIABETES EDUCATION CENTER IN THE LANCASTER COMMUNITY

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Project Date: May 8 - May 31, 2000

PALMETTO TRI-COUNTY INTERNAL MEDICINE, P.A. LANCASTER, S.C.

- Others involved:
  - Julie Bowers, RN, FNP
  - Cheri Plyler, Catawba-Wateree AHEC
  - F. Michael Kimbrell, M.D.
  - Pam Harper, Catawba-Wateree AHEC

PROBLEMS

- The prevalence of diabetes is higher in Lancaster County than it is nationwide.
- Past student projects have shown that the management of diabetes in Lancaster County can be improved (represented by data from the Tri-County Internal Medicine practice).
- Millions of dollars in local grant money exist for projects that will benefit the Lancaster community.

AIMS

- To determine the prevalence of diabetes and the money spent treating the complications of diabetes in Lancaster County.
- To write a grant proposal that reflects the need for the improvement of diabetes management and education in Lancaster community.
- To improve diabetes management and education in the Lancaster community.

IDENTIFIED MEASURES

- Percentage of the population of Lancaster county with diabetes.
- Amount of money spent treating the complications of diabetes in Lancaster County.
- Number of citizens responding to local survey about prevalence of diabetes in the Lancaster community.
- Grant proposal submitted to local foundation asking for money to create diabetes education center.
- Diabetes education center formed for the Lancaster community.

CHANGES FOR IMPROVEMENT

- The J. Marion Sims Foundation was established from the proceeds of the sale of the Elliott White Springs Memorial Hospital in Lancaster, SC.
  - The Foundation's intent has been to support new ideas that will have a positive impact on the quality of life for the citizens of Lancaster County, supporting programs and projects of prevention, education, and therapy that enhance health and wellness.
  - There is approximately 4 million dollars available at the present time, and the Foundation is accepting grant proposals.
- Use the Diabetes Initiative of South Carolina as a springboard for creating a diabetes education center in Lancaster County with funding from the J. Marion Sims Foundation.

PDSA Cycle

- **P**lan:
  - Meet with Julie Bowers and Cheri Plyler to brainstorm information to be included in J. Marion Sims Foundation grant proposal.
  - Research diabetes statistics for Lancaster County.
  - Create and plan community survey about diabetes, whose results could potentially allow the community's input about diabetes in the grant proposal.
- **D**o:
  - I met with Julie Bowers and Cheri Plyler on May 18 at the AHEC office.
  - I did an internet and resource search to determine the prevalence of diabetes in Lancaster County and the costs of treating diabetes in this county.

PDSA Cycle (continued)

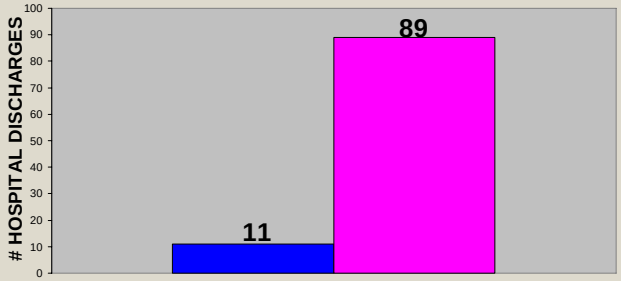
- I created a ten question survey and cover letter explaining the purpose of the survey, and I generated a mailing list, at random, of 500 residents of Lancaster County.

- **S**tudy:
  - During the meeting, a budget was formed that included all items needed to open a diabetes education center. The budget was estimated to approximately a half million dollars for the first year of operation. The figures will be used to determine how much money the project committee will ask for in the grant proposal. Julie Bowers and Cheri Plyler will contact the necessary people that will include letters of support with the proposal.
  - The following statistics for Lancaster County were found in my internet and resource search:

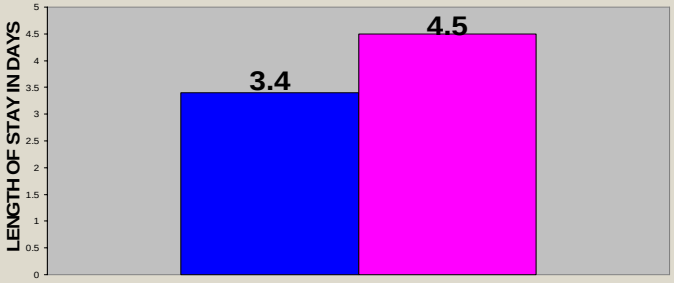
ANALYSIS OF HOSPITAL INPATIENT STAYS FOR DIABETES WITH AND WITHOUT COMPLICATIONS IN LANCASTER COUNTY IN 1998

Data taken from the website of the SC Budget and Control Board, Office of Research and Statistics

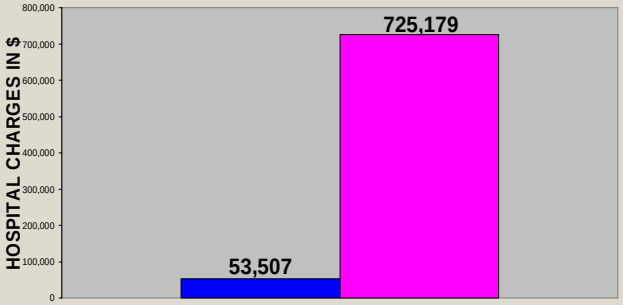
TOTAL # OF HOSPITALIZATIONS



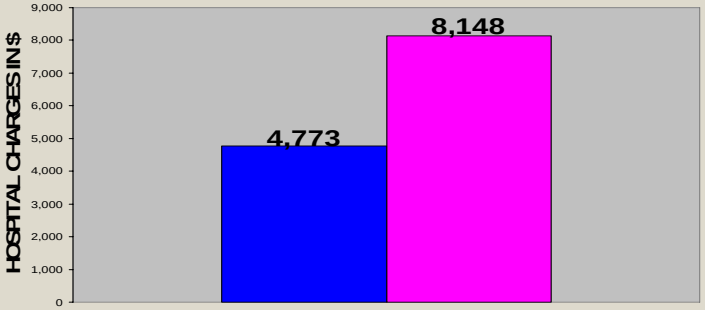
AVG. LENGTH OF HOSPITAL STAY



TOTAL HOSPITAL CHARGES



AVG. HOSPITAL CHARGES PER PATIENT



LEGEND: = DIABETES WITHOUT COMPLICATIONS = DIABETES WITH COMPLICATIONS

PDSA Cycle (continued)

- The other available data that I found on the prevalence of diabetes in Lancaster County was the same data found by Julie Bowers in a research project she did to fulfill her requirements for her degree of Master of Science in Nursing.
  - It revealed that 5.7% of South Carolinians have been diagnosed with diabetes, and 50% of those with diabetes have not been diagnosed. In 1998, 6.4% of the residents of Lancaster County were diagnosed with diabetes.
- My survey was approved by Julie Bowers, Cheri Plyler, and Dr. Kimbrell will be mailed to members of the community who were selected at random. AHEC will provide the envelopes, labels, and postage. The results will be used to reflect the community's opinion about diabetes and project.

PDSA Cycle (continued)

- **A**ct:
  - Include the diabetes statistics for Lancaster County in grant proposal under the requests for the following information:
    - How many people will receive direct services from the project?
    - How will the project will address the health and wellness needs of Lancaster County?
  - Mail out survey and cover letter with self-addressed stamped envelope to the 500 names on the mailing list. Analyze responses to include in grant proposal.

LESSONS LEARNED

Diabetes presents to be a large health problem in Lancaster County. In this county in 1998, there were eight times more hospital admissions for diabetes with complications than without complications,and the total cost for treating diabetes with complications in the hospital were more than thirteen times the cost for treating diabetes without complications.

The best way to prevent the development of the complications of diabetes is to educate patients about these complications and screen them regularly for them.

Millions of dollars exist in Lancaster County for the exact purpose of creating a project of this nature. The grant proposal for this money should be able to present the overwhelming effect diabetes has on Lancaster County. Receiving this money will depend on how effectively the need is presented. Hopefully the survey will allow the community members to have some input, thus increasing the effectiveness of the grant proposal.