

Diabetic Education Center  
The People's House

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# The Red Rose City Lancaster SC

- Others Involved
  - Julie Bowers, RN, NP
  - Michael Kimbrell, MD
  - CW-AHEC
  - The good people of Lancaster County

# Problems

- Lancaster county has a devastatingly high prevalence rate of diabetes at 6.4% Vs national average of 5.7%.
- This presents a huge economic burden for the county in complication costs.

# Aims

- To improve diabetes management in Lancaster county, specifically through education in a self-management system.
- Secure grant funding for a state-of-the-art Diabetic Education Center providing medical care with MD, RN, etc.
- Positively affect complications of diabetes through improved patient education and access to focused diabetic care.

# Diabetic Education Center:

A proposal to provide support and education for Diabetics in Lancaster county. (Measures)

- Continue with information gathering through surveys of area residents set up by previous student.
- Research current statistical data concerning diabetes in Lancaster.
- Create database of responses, specifically concerning population education level concerning diabetes and their perceived need for a Diabetic education center.
- Measure area residents' support for proposed Diabetic Education Center through same survey responses.
- Compile data into presentation and analytical form to augment Grant proposal for future use.

# Changes For Improvement

- Lancaster is fortunate to have a charitable fund, the J. Marion Sims Foundation, that supports projects and ideas that improve the quality of life of the county's residents.
- Our change for improvement involves obtaining this funding by demonstrating need, desire, and support for this Diabetic Education Center.

# PDSA Cycle

- Plan:
  - To continue compiling survey responses
  - Organize this data based on 6 regions of the county
  - Create statistics specifically concerning:
    - The prevalence of diabetes by random sample
    - The community education level about diabetes
    - The community support for a possible DEC
  - Research more statistics on diabetes prevalence in Lancaster.

# PDSA Cycle

- Do:
  - I met with Julie Bowers and discussed required statistics and requested research.
  - Working with CW-AHEC, I continued collecting and sorting responses based on six separate areas of Lancaster.
  - I created a database in Microsoft Excel format to analyze data based on the ten question survey.
  - I researched the prevalence, morbidity, mortality, and complication costs of diabetes in Lancaster, attempting to find larger numbers.

# PDSA Cycle

- Study:
  - On analysis of the data, I used the survey responses to create statistics for the following
    - Prevalence of diabetes among respondents
    - Percent of family members with diabetes
    - Community attitude towards DEC concerning the peoples need for such a center and their ideas about its' possible benefit to the community.

# PDSA Cycle

- Study:

- Results from analysis in chart form.

- |    | L  | K  | GF  | FL  | IL  | HS  | T  |
|----|----|----|-----|-----|-----|-----|----|
| P  | 33 | 23 | 40  | 0   | 0   | 0   | 29 |
| FH | 67 | 62 | 50  | 50  | 60  | 0   | 62 |
| N  | 80 | 92 | 100 | 100 | 60  | 100 | 84 |
| S  | 73 | 77 | 100 | 100 | 100 | 100 | 80 |

- Key: P-prevalence; FH- +family history; N- need; S-support; L-Lancaster; K-Kershaw; GF-Great Falls; FL- Fort Lawn; IL- Indian Land; HS- Heath Springs; T-Total. All numbers shown are percentages of returned surveys.

# PDSA Cycle

- Act:
  - Created database with statistical analysis of responses geared toward proposal augmentation.
  - These statistics will be included in the proposal put forth to the J. Marion Sims Foundation. This will give some idea of the need and support in the Lancaster community for our DEC.

# Lessons Learned

- As the previous students have all learned, Lancaster suffers from a diabetic problem larger than the national and state average. This burden could be lightened with the implementation of a Diabetic Education Center modeled around a solid core of self-management and disease understanding.
- As we have heard so many times before, the best defense is a good offense. In this case we would be able to effectively arm Lancaster's diabetics with knowledge and understanding of their disease. This understanding allows them to prevent possible complications instead of being forced to defend against these same complications in the absence of such knowledge.
- This statistical data will be used to procure the funding for the Diabetic Education Center and greatly improve the quality of life of Lancaster's citizens.