Moving Pickens County Primary Care towards Patient-Centered Medical Home Qualifications through a Diabetes Self-Management Education Program

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Pickens County, AL

- Population: 19,349
- 7 primary care physicians
Pickens County, AL

Pickens County Primary Care
Dr. Julia Boothe
• 15.1% of the population >20 years old has been told by a physician they have diabetes
  • 12.12% in the state of Alabama
  • 9.11% in the United States
Why a Diabetes Self-Management Education (DSME) Program?

- Patients are more likely to engage in preventative care services and are less likely to participate in risky health behavior.

- **Goal for Healthy People 2020:**
  - Increase the amount of diabetic patients that receive diabetes education training to **62.5%**
  - In 2008, only **56.8%** of diabetic patients reported they participated in a diabetes education program
Which Patient-Centered Medical Home (PCMH) qualification will this fulfill?

- The Quality and Safety standard set by the Joint Principles of the Patient-Centered Medical Home
  - Involves assuring the patient participates in the decision-making process
Why must the DSME be recognized by the American Diabetes Association (ADA)?

- Recognition is mandatory in order to receive reimbursement from Medicaid and Medicare.
- Standards based on National Standards for Diabetes Self-Management Education and Support
1. Diabetes disease process
2. Nutritional management
3. Physical activity
4. Medications
5. Monitoring blood sugar
6. Acute complications
7. Chronic complications
8. Psychosocial issues
9. Health and behavior change
Objectives

1. What are the characteristics, health status, and educational needs of the diabetic patients at Pickens County Primary Care, and are they interested and/or willing to participate in a DSME Program?

2. Is the staff of Pickens County Primary Care interested and/or willing to be involved in the creation and implementation of a DSME Program?

3. Does Pickens County Primary Care have the resources and staff to meet the requirements for their DSME Program to receive recognition from the American Diabetes Association Education Recognition Program?

4. What curriculum and structure should the DSME Program for Pickens County Primary Care follow to best meet their patients’ educational and support needs?
Outline

Background  Objectives  Methods  Results/Impact
Methods

DSME Implementation Plan

- EHR Review
- Patient Survey
- Clinic Staff Survey
EHR Review

- Assess the total number of diabetic patients
- Assess complications, controlled vs. uncontrolled, and number of diabetes-related visits through ICD-9 codes
<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>Complication</th>
<th>Controlled/Uncontrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>250.00</td>
<td>None</td>
<td>C</td>
</tr>
<tr>
<td>250.02</td>
<td>None</td>
<td>UC</td>
</tr>
<tr>
<td>250.10</td>
<td>Ketoacidosis</td>
<td>C</td>
</tr>
<tr>
<td>250.12</td>
<td>Ketoacidosis</td>
<td>UC</td>
</tr>
<tr>
<td>250.20</td>
<td>Hyperosmolarity</td>
<td>C</td>
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<td>250.22</td>
<td>Hyperosmolarity</td>
<td>UC</td>
</tr>
<tr>
<td>250.30</td>
<td>Other Coma</td>
<td>C</td>
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<tr>
<td>250.32</td>
<td>Other Coma</td>
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<tr>
<td>250.40</td>
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<td>250.42</td>
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<td>250.52</td>
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<td>UC</td>
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<tr>
<td>250.60</td>
<td>Neuro</td>
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<td>250.62</td>
<td>Neuro</td>
<td>UC</td>
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<tr>
<td>250.70</td>
<td>Peripheral Circulatory Disorder</td>
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<tr>
<td>250.72</td>
<td>Peripheral Circulatory Disorder</td>
<td>UC</td>
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<td>250.80</td>
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<td>250.82</td>
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<td>UC</td>
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<tr>
<td>250.90</td>
<td>Unspecified</td>
<td>C</td>
</tr>
<tr>
<td>250.92</td>
<td>Unspecified</td>
<td>UC</td>
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</table>
Patient Survey

• Based on Diabetic Care Profile by the Michigan Diabetes Research and Training Center

Topics Include:

Demographics
Health status
Education/advice received
Understanding of diabetes care
Social support

Logistics of classes
Transportation availability
Technology access
General interest
Clinic Staff Survey

- Assess the resources and willingness of the staff to help with the development and implementation of a DSME program
Methods

EHR Review

DSME Implementation Plan

Patient Survey

Clinic Staff Survey
Outline

Background

Objectives

Methods

Results/Impact
Results of EHR Review
(Data from July 2014 to Dec 2014)

- Estimated # of patients: 5200
- Total number of diabetic patients seen: 342

**Gender**
- 59% females
- 41% males

**Age**
- Average: 62
- Min: 15
- Max: 96
## Results of EHR Review

### Age and Gender Distributions

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>Number of Patients</th>
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<tbody>
<tr>
<td>10-19</td>
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<tr>
<td>20-29</td>
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<td>50-59</td>
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<td>70-79</td>
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<tr>
<td>80-89</td>
<td>21</td>
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<tr>
<td>90-100</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>9</td>
</tr>
</tbody>
</table>

The diagram above illustrates the age and gender distributions of patients. The pink bars represent females, and the blue bars represent males.
Results of EHR Review

- Total number of visits: 858
  - Average of 2.5 visits per patient
  - Max # of visits: 10

# Patients with 250.00 (C) and 250.02 (UC)

- Only 250.00: 202 (59%)
- Both: 102 (30%)
- Only 250.02: 38 (11%)
Results of EHR Review

**Controlled vs. Uncontrolled Visits**
- 246, 29%
- 592, 71%

**Visits with Complications**
- 250.30 (coma, C)
- 250.50 (eye, C)
- 250.52 (eye, UC)
- 250.60 (neuro, C)
- 250.62 (neuro, UC)
- 250.92 (unspecified, UC)
Results

To be continued...
Impact

- Needs assessment of the diabetic patient population at Pickens County Primary Care
- Selection of the best curriculum for the clinic
- Preliminary plan of implementation for a DSME Program
Acknowledgements

• Dr. Lea G. Yerby
• Partially supported by the Alabama Family Practice Rural Health Board
1. Map of Alabama highlighting Pickens County, Courtesy of Wikimedia Commons, accessed on 4/13/15
2. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. Courtesy: Community Commons, January 24, 2015, date retrieved.
3. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Courtesy: Community Commons, April 3, 2015, date retrieved.
Questions?

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