Improving the Nutritional Status of Patients with Diabetes
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Background
• The prevalence of diabetes is estimated to be 11% in Dallas County and 9.3% nationwide.1
  o 89.5% of patients with diabetes living in Texas are overweight (BMI >25) or obese (BMI >30)2
• Adverse health events associated with diabetes, such as cardiovascular complications, are worse in patients who are also overweight or obese,3
  o Maintenance of a healthy weight and diet are critical components to management of diabetes.

Aim Statement
• The aim of this project is to increase the percentage of patients in the UT Southwestern Internal Medicine Subspecialties clinic with a healthy BMI, 18.5-24.9, by 20% by June 2020.
  o A healthy BMI is associated with better health outcomes in patients with diabetes

Define
• Literature Review
  • Stakeholder Analysis
  • Project Charter
  • Brainstorming and Affinity Diagram
  • Fishbone Diagram
  • Provider Interviews
  • DPAT Meetings

Measure
• Provider Interview (PDSA)
  • Driver Diagram (DPAT and provider feedback)
• Patient Shadowing (PDSA, FMEA)
• DSQ Nutrition Survey (PDSA)
• Data Extraction Plan (PDSA)

Analyze
• Provider Interview Scales
  • Compare Provider and Patient Perspectives
  • DSQ Nutrition Survey Results
  • Health Outcomes Data
  • Prioritization Matrix for Ideas to Test

Discussion
This project highlights both the patient and provider perspective on nutrition and diabetes.

Patient:
• DPAT (Diabetes Patient Advocacy Team) members provided insight on key factors limiting their ability to eat healthy. The patients identified lack of desire to eat healthy, management fatigue, lack of time, stress eating, patient misunderstanding, and depression as key factors hindering patient’s ability to eat healthy (shown in Fig. 2 and 3)

Provider:
A scale regarding the efficacy of the nutritional resources provided, the access to nutritional resources, and patient understanding of a proper diet was also administered. The provider answered 1-10 based on his or her confidence level; 1 being the least confident and 10 being the most confident.

Table 1

<table>
<thead>
<tr>
<th>Measure</th>
<th>Physicians (n=11)</th>
<th>Nurses (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Understanding of Proper Diet</td>
<td>6.32</td>
<td>6.18</td>
</tr>
<tr>
<td>Access to Nutritional Resources</td>
<td>7.38</td>
<td>7.5</td>
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<tr>
<td>Efficacy of Nutritional Resources</td>
<td>6.88</td>
<td>8.25</td>
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Cycle 1: Data Extraction
Process Measure - Obtain baseline and the ability to assess relationships between nutrition and health outcomes

Cycle 2: Patient Shadowing
Process Measure - At least 5 patients agree to be shadowed

Cycle 3: Provider Interviews
Process Measure - Quantitative data obtained from all volunteered providers

Cycle 4: Patient Survey
Process Measure - Survey completed by 100 patients

Figure 1
• PDSA (Fig. 1)
  • Brainstorming and Affinity Diagram
  • Fishbone Diagram (Fig. 2)
  • FMEA on patient shadowing
  • Driver Diagram (Fig. 3)
  • Prioritization Matrix

Figure 2
Red: Factors with the highest number of votes
Blue: Factors with more than one vote

Figure 3
Primary and secondary drivers of unhealthy eating
Based on a literature review and patient feedback (pictured)

Citations