INTRODUCTION

Background: Food insecurity among young children is often invisible and in the state of Vermont, it is reported that one in 6 children are experiencing food insecurity.

The validated 2-item food insecurity screening tool is not routinely being utilized in the pediatric primary care setting.

Rationale: The 2-item food insecurity screening tool has proven to be sensitive, specific, and valid.

The providers at Timber Lane Pediatrics agree it is necessary to routinely screen families at all health maintenance visits and perceive a need for a protocol on how to respond to a positive food insecurity screening.

Purpose: The purpose of this project was to increase rates of food insecurity screening and subsequent intervention leads to improved health outcomes.

METHODS

Quality improvement project

Setting:
• Pediatric practice – Burlington, South Burlington, and Milton, VT
• 14 providers, serving 8,000 patients

Utilized a community health team social worker, HelpMeGrow VT and electronic health record (EHR)

RESULTS

- Total of 4,243 patients seen for health maintenance visits and of those 2,006 patients were screened (47.28%)
- 127 screened positive (6.33%)
- The first month of implementation 20.95% were screened and this number steadily increased to 63.13% by the end of December.

Screening was variable by provider with the highest rate of 80.88% of patients and lowest at 16.67%.

Location:
• 9.59% positive screens at Burlington
• 8.97% positive screens at Milton
• 3.33% positive screens at South Burlington

Zip code: Burlington zip codes, followed by Milton and South Burlington

Age: no one age had alarmingly higher numbers than another.

Results of food insecurity screening tool have been connected with resources.

Food Resource Care Plan

Table 1: Food Action Plan

<table>
<thead>
<tr>
<th>Food Resource Action Plan</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1936</td>
<td></td>
</tr>
<tr>
<td>Screened</td>
<td>1152</td>
<td>59.50%</td>
</tr>
<tr>
<td>Screened Positive</td>
<td>79</td>
<td>6.86%</td>
</tr>
<tr>
<td>Food Action Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected with Resources</td>
<td>16</td>
<td>81.25%</td>
</tr>
</tbody>
</table>

Figure 1: Screening Tool

Figure 2: Office Workflow

DISCUSSION

Chi-square analysis of screening rates over time and by location showed statistical significance and not due to chance. ANOVA analysis showed medium variance based on screening rates over time and large variance based on location.

The aims of this project were met. Timber Lane Pediatrics is now providing universal screening at all health maintenance visits. The project identified locations/providers/nurses that need further support to even further increase screening rates. The project identified office locations and zip codes with greater need.

Barriers/Limitations:
• Study was not intended to be generalizable
• Unforeseen factors affecting internal validity
  - Change in EHR
  - Use of email vs in person
  - Additional form
  - Variability in provider/location screening rates
  - Low use of food resource plan

CONCLUSIONS

Implementing the food insecurity screening tool increased screening rates and facilitated connection of food insecure patients with appropriate resources.

Further study is necessary to know if identifying food insecurity and subsequent intervention leads to improved health outcomes.

Suggested next steps: Introduce updated Bright Future forms at all health maintenance visits because the food insecurity screening tool is incorporated in the newest edition.

REFERENCES


3. Feeding America. (2018). Hunger in Vermont. Retrieved from http://www.feedingamerica.org/hunger-in-america/vermont/?gclid=CJxUK9jviWIJBqigARoA5sPS1swdpPw6wAEBvbAETHItQf-1tHS4iBxZ2H506LmAvMxUk92aAgIEWEALw_wcB

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Figure 1: Screening Tool

Figure 2: Office Workflow