Screening for food insecurity
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Introduction

Food insecurity: limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire adequate food, generally accepted by USDA

- 20% of US households with children and 10% of the population of Minnesota are food insecure
- Assumptions about which patients may be food insecure are inaccurate
- No direct association between food insecurity and level of education or socioeconomic status
- 30% of food insecure households nationwide have incomes above the federal poverty threshold
- Screening for food insecurity is currently not standard practice despite being a prevalent social determinant of health

Objectives

- Identify an effective screening process for food insecurity in a clinic setting in order to offer those patients assistance
- Educate clinicians, staff and patients regarding food insecurity and its impact on health outcomes
- Develop a transferable tool kit for screening that can be implemented in other clinics as part of an ongoing and sustainable screening process

Methods

- Screening conducted by use of US Department of Agriculture (USDA) approved 2 question questionnaire with 97% sensitivity and 83% specificity for food insecurity

Food insecurity or lack of food can mean skipping meals to make food last longer. It can also mean having to choose between buying food or paying your bills. We can help you if you and your family are dealing with this.

Please let us help you by answering these questions:
1) Within the past 12 months have you ever worried that your food would run out before you got money to buy more?
   Yes ☐ No ☐
2) Within the past 12 months the food that you bought just didn’t last and you didn’t have enough money to get more.
   Yes ☐ No ☐

- Trial of six different ways of implementing the screening questionnaire, lasting 4-6 weeks each and conducted every 6 months, with a total of 1874 patients completing the questionnaire:
  1. Patient conducted: anonymous self-completion of questionnaire during check-in process. Patient returned questionnaire to drop box at front desk (offered to all patients visiting clinic)
  2. Physician conducted: completion of questionnaire by physician during all well exams. Physician was asked to include standardized documentation in well exam clinical note (only patients having well exams / physician opt-in)
  3. Physician conducted: completion of questionnaire during all well exams using standardized documentation already embedded into well exam clinical note (only patients having well exams / physician opt-in)
  4. Patient conducted: identified self-completion of questionnaire during check-in process. Paper questionnaire collected by rooming staff (offered to all patients visiting clinic)
  5. Patient conducted: identical to (4) in addition to food insecurity awareness posters in exam room and bathrooms, and video in waiting room
  6. Patient conducted: identical to (5)

Measures

- Assessed during each trial
  - Number of patients screened
  - Number of positive screens
  - Percent identified as positive
  - (In addition, during the final trial, tracked patients who chose not to complete questionnaire - opportunities to screen, as well as those who were newly detected - 82% when compared to registry)

Results

Screening Trials

<table>
<thead>
<tr>
<th>Detection Rates</th>
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<tbody>
<tr>
<td>Patient</td>
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<tr>
<td>Positive</td>
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<tr>
<td>Negative</td>
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Conclusions

- Most effective screening process: patient conducted screening during check in
- Of patient conducted screening, anonymous reporting yielded a higher detection rate than patient identified
- There may be patient embarrassment or shame at disclosing food insecurity to a physician
- There may be physician discomfort at asking about adverse social circumstances, resulting from a lack of personal experience and/or lack of knowledge about how to adequately address positive findings

Ongoing work

- July 2016: Offered Cooking Matters’ cooking classes through University of Minnesota Extension’s Supplemental Nutrition Assistance Program Education (SNAP-Ed). We plan to partner with a Pediatric clinic for continuing classes
- We plan to continue screening twice per year and all new clinic patients given the high screening rate with our current process as well as the percentage of newly detected positives
- Training residents to recognize and address effects of food insecurity on health
- We continue to look for additional advocacy opportunities regarding food insecurity

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References