

Background

- Current leading causes of morbidity and mortality in primary care are cardiovascular disease, diabetes, and obesity.¹
- It is necessary to address healthy behaviors during early years of life.²
- Children have high nutritional requirements for adequate growth, overall health, brain development, and resistance to disease.³
- Pediatricians are likely to discuss nutritional concerns during well-child visits; however, these discussions tend to be brief and inconsistent.
- There is a need for improved standardization of nutrition-related discussions among pediatricians in primary care.

Objectives

1. Promote consistent client-centered, nutrition-based discussions between all health providers and caregivers at a pediatric primary care clinic.
2. Provide educational resources that promote caregiver understanding of recommendations to improve carryover into the home.

Methods

Setting: UPMC Children's Primary Care Clinic – Oakland

Design: Quality Improvement Project

Inclusion Criteria:

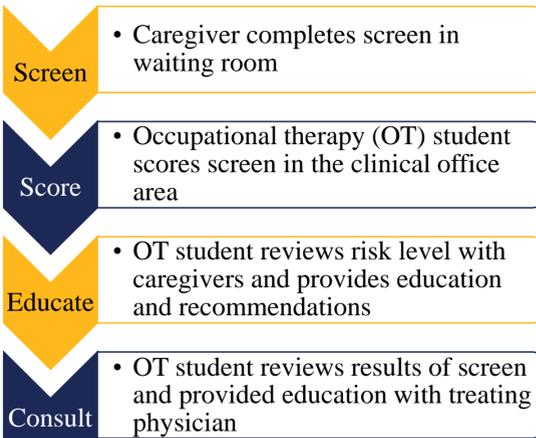
- Age: 18-35 months
- Visit type: Well-child check
- Treating physician: Non-resident, faculty provider

Measures:

- 1) NutriSTEP® Toddler
 - The NutriSTEP® Toddler is a 17-item questionnaire screening tool that identifies a child's level of nutritional risk based on current behaviors.⁴
 - Three risk-levels identified: Low, Moderate, High
- 2) Brief Caregiver Survey (see questions below)

Process

Caregiver Survey



Prior to the NutriSTEP®, how much of this information did you already know?

- Likert Scale, 1-5
- 1: None
- 2: Little
- 3: Some
- 4: Most
- 5: All

What was the most helpful:

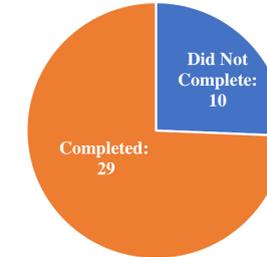
- Completing the NutriSTEP®
- Reviewing the risk level
- Reviewing recommendations
- None of this was helpful

Results

Child Demographics (N=29)

	n (%)	% High Risk
Sex		
Female	14 (48)	43%
Male	15 (52)	6%
Age		
18-23 months	9 (31)	11%
24-29 months	15 (52)	33%
30-35 months	5 (17)	20%
Race		
Black	21 (72)	29%
PCC Nutritional Risk Level		Expected Prevalence⁴
Low	16 (55)	55-75%
Moderate	6 (21)	11-30%
High	7 (24)	10-17%

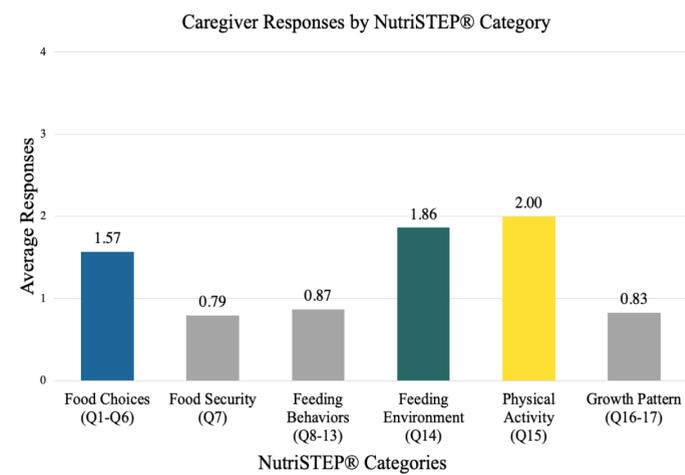
Completion Rates



Reasons for Not Completing Screen

Spanish Speaking	6
Declined	2
Not Primary Caregiver	2

NutriSTEP® Data Collection



*Responses are scored 0-4. A high score indicates higher risk.

Flagged Questions:

- Q1 My child usually eats grain products
- Q3 My child usually eats vegetables and fruit
- Q14 My child eats meals or snacks while watching TV, or being read to, or playing with toys
- Q15 My child usually watches TV, or uses the computer, or plays video games

Caregiver Feedback

Written Survey

Baseline Knowledge

Caregivers reported already knowing most of the nutritional information; average score of 4 out of 5.

Most helpful items throughout process

- 61% found reviewing the recommendations helpful
- 55% found completing the NutriSTEP® helpful
- 16% found hearing their child's risk level helpful
- 11% found none of it helpful

Verbal Feedback

Nutrition

- "I offer my child healthy food, but they won't eat it."

Screen Time

- Surprised by recommended screen time
- Have awareness of the need to limit screen time but unsure of strategies

Physical Activity

- "I know my child should be moving more but I can't get them to be more active."

Conclusion

- The clinic serves children at high-risk for nutrition-related problems.
- To promote sustainability, three best practice, evidence-based recommendations were developed as potential options to meet the needs of the clinic, physicians, and families they serve.
- All recommendations focused on areas identified as priorities based on responses to the NutriSTEP®: screen time, eating meals with distractions, amount of grain products consumed, and amount of fruits and vegetables consumed.

Recommendations

Good: Educational Materials

- Universal education sheet
- Bulletin boards
- Topic-specific educational materials

Better: New Screening Tool

- Develop revised nutrition screen with flagged questions
- Create .dotphrase document in EMR to review flagged questions

Best: Continued use of NutriSTEP®

- Additional Considerations:
 - Well-child visit timing
 - All toddler well-child visits
 - Choose age specific well-child visit
- Location
 - Waiting room
 - Examination room
- Usage
 - As intended
 - Similar to M-CHAT

Implications for Future Practice

- The "Good" recommendation was most feasible for the clinic at this current time.
- The NutriSTEP® may be a *helpful* screening tool to promote uniform discussions around nutrition and healthy behaviors in well-child visits.
- The NutriSTEP® can provide information regarding *trends in client-centered priorities* in order to guide future discussions in well-child visits in primary care clinics.
- Occupational therapy (OT) can provide valuable input and education to promote healthy growth and development in children in the primary care setting.
- The Peer Network anticipates that following the completion of the Capstone Experience, there will be an increase in awareness and referrals to OT at the site.

Acknowledgments

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References

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