Building Healthy Systems: A Community-Clinic Partnership Approach for Transforming Lifestyles of Low-Income Families

At-risk for Chronic Disease

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Abstract

Maryland Expanded Food and Nutrition Education Program (EFNEP) offers nutrition education to low income families in partnership with Community Clinics Incorporated (CCI) with the shared goal of addressing childhood obesity using Policy, Systems, and Environmental (PSE) approaches. CCI Clinics are Federally Qualified Health Centers that serve pediatric patients in Maryland. The aim of this study was to examine whether system changes, including assessment of Physical Activity as a Vital Sign (PAVS), electronic health record (EHR) changes and workflow redesign, resulted in increased referrals for overweight and obese pediatric patients. CCI incorporated two screening questions for physical activity and screen time into EHR and integrated referral to EFNEP into the workflow. The screening questions facilitated conversations between physicians and families regarding weight and sustainable physical activity. EFNEP and CCI decided to partner to provide free nutrition and physical fitness education programming onsite at the clinics. After successfully establishing and implementing a referral program for pediatric patients at-risk for overweight and obesity, EFNEP approached the CCI senior leadership about developing a pilot project to incorporate PAVS change into the clinical obesity prevention strategy. CCI and EFNEP collaboratively developed the protocols for system changes. Funding and IRB approval were received in 2015. All staff were trained extensively in project implementation. The project has been underway since the end of 2015.

EFNEP

Expanded Food and Nutrition Education Program

What is EFNEP?

- Is a USDA funded nation-wide program that unites federal, state, and local resources to provide free nutrition education workshops to limited income families and youth.
- Operates through the Outreach Mission of the Land-Grant Universities in every state, the District of Columbia, and the six U.S. territories.

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Clinical Partnership

Maryland EFNEP has a collaborative partnership with Community Clinics Incorporated (CCI) Health and Wellness Services with the shared goal of reducing childhood obesity in the state of Maryland using the Policy, Systems, and Environmental (PSE) change approach. CCI Clinics are Federally Qualified Health Centers that serve low income, pediatric patients and their families in the six clinics in Maryland. The partnership began several years ago because there was a pressing need among these local health care clinics to have a place to refer children who were at risk for being overweight or obese. The clinic staff were too overwhelmed with patient load to thoroughly educate children's families about physical activity and nutrition. EFNEP and CCI decided to partner to provide free nutrition and physical fitness education programming onsite at the clinics. After successfully establishing and implementing a referral program for pediatric patients at-risk for overweight and obesity, EFNEP approached the CCI senior leadership about developing a pilot project to incorporate PSE change into the clinical obesity prevention strategy. CCI and EFNEP collaboratively developed the protocols for system changes. Funding and IRB approval were received in 2015. All staff were trained extensively in project implementation. The project has been underway since the end of 2015.

Theoretical Model

A Socio-Ecological Framework for Nutrition & Physical Activity

Policy and System Change

- Health care systems
- Community education
- Food systems
- Physical activity resources
- Health behavior change
- Physical activity promotion

Individual/Clinic Level

- Clinical practice guidelines
- Community education
- Physical activity resources
- Health behavior change
- Physical activity promotion

Organizational Level

- Health care systems
- Community education
- Food systems
- Physical activity resources
- Health behavior change
- Physical activity promotion

PSE Changes

Policy, Systems, and Environmental (PSE) change: A way of modifying the larger policy systems and environments of communities to improve healthcare outcomes.

Screening Questions: Incorporate 2 physical activity questions into the clinic’s Electronic Health Record (EHR) as a vital sign reading for every patient.

Referral: Physicians refer overweight/obese pediatric patient/parent dyads to EFNEP to be enrolled in workshops.

Resources: Patients receive information about free physical activity resources in their local community.

Theoretical Model

Transforming Lifestyles: Evaluation Logic Model

- Primary outcome: Improved Physical Activity
- Mid-term outcomes: At-risk for obesity
- Long-term outcomes: Improved child weight status

Preliminary Conclusions and Implications

- Outcome data indicates positive change in all key indicators of diet quality and physical activity.
- Systems change requires a multi-step process:
  - Change in workflow
  - Integration of PAVS into EHR
  - Training of staff
- Surveys of Primary Care Providers at entry and exit in the clinics indicate that relatively modest investments can enable changes in the workflow (EHR), and these changes are viewed by providers as being feasible and beneficial for program participants.
- Primary Care Providers emphasized the need for referral plans that build promote healthy lifestyles and facilitate self efficacy for patients in the community setting.
- They also reiterated the need for more training and skill in dealing with obesity in diverse communities.
- Both systems change and effective program outcomes in clinical settings (while feasible) require ongoing training and must be viewed as an iterative and evolutionary process.

Theory of Change

- Systems, and Environmental (PSE) change:
  - Question
- Screening Questions: Incorporate 2 physical activity questions into the clinic’s Electronic Health Record (EHR) as a vital sign reading for every patient.
- Referral: Physicians refer overweight/obese pediatric patient/parent dyads to EFNEP to be enrolled in workshops.
- Resources: Patients receive information about free physical activity resources in their local community.

Health Care System Expansion Model

- Implement PAVS Screening Questions
- Community Clinic Inc.
- Change in the workflow
- Match Children At-risk for Obesity and EFNEP Clinics
- Integrate Partnership
- Culturally Tailored EFNEP Nutrition Education Series
- Referring Smart Lifestyle Activity & Cooking Matters for Ada
- EFNEP Evaluation, Physical Activity Assessment, and BMI Measurements

EFNEP Evaluation, Physical Activity Assessment, and BMI Measurements

EFNEP Evaluation, Physical Activity Assessment, and BMI Measurements

References

- Building Healthy Systems: A Community-Clinic Partnership Approach
- Transforming Lifestyles: Evaluation Logic Model
- Preliminary Conclusions and Implications

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