



Beyond BMI: Envisioning an EMR-based surveillance system for Ontario measuring childhood healthy weights—including risk and protective factors.

An overview of phases 1 and 2 plus an update on phase 3.

Our Vision

An Ontario childhood healthy weights surveillance system which includes risk and protective factors for childhood healthy weights. This system will be capable of producing local-level estimates that will inform program planning and evaluation within Public Health Units, and support the care and management of children and their families in primary care practices.

Background

- Rates of childhood obesity are on the rise in Ontario.
- Currently no central data source for heights and weights of young children in Ontario exists.
- EMR use in primary care is expanding across Ontario.
- Addressing childhood healthy weights requires an ecological approach.
- NutriSTEP® is a valid and reliable screening tool to assess nutritional risk and protective factors for healthy eating and childhood healthy weights.

Phase 1: Data quality assessment of childhood healthy weights from Electronic Medical Records (EMRs) (2015)

Objectives

- 1) To develop a process and test the feasibility of acquiring EMR data from Better Outcomes Registry Network (BORN) Ontario.
- 2) To examine the quality of childhood heights and weights data collected through EMRs, from BORN Ontario.
- 3) To estimate the prevalence of healthy childhood heights and weights.

Methods

- Data completeness was analyzed by determining the percentages of missing data for each variable.
- Prevalence of healthy weights was calculated using the World Health Organization (WHO) Child Growth Standards.

Results

- Data on childhood heights and weights collected were of high quality.
- Twenty-two per cent (22%) of 17 to 22 month old toddlers were affected by overweight or obesity.

Phase 2: Nutritional risk and protective factors for childhood healthy weights assessed using NutriSTEP® in primary care practices (2015)

Objectives

- 1) To examine how primary care practices use NutriSTEP®, interpret results and provide feedback to parents.
- 2) To understand barriers and facilitators to NutriSTEP® screening use by primary care providers.
- 3) To determine receptivity of primary care practices to collect NutriSTEP® data electronically through the integration in EMRs.

Methods

- Interview guide developed using a framework by Durlak and DuPre.
- Ten interviews conducted with “knowledgeable users” of NutriSTEP®.
- Analysis performed using NVivo.

Results

- Primary care practices were using NutriSTEP® as an effective screening tool to identify nutritional risk and protective factors for childhood healthy weights.
- Primary care practices were enthusiastic about the potential integration of NutriSTEP® into EMRs.
- Key partnerships are important to assist in collaboration between public health and primary care practices, as well as with BORN Ontario to collect data province-wide from EMRs.

For a copy of the full Phase 1 and Phase 2 report or reference list, visit www.publichealthontario.ca/en/ServicesAndTools/Documents/LDCP/LDCP_BeyondBMI_FinalReport_2015.pdf.

Phase 3: Expanding an EMR-based childhood healthy weights surveillance system to include NutriSTEP® data (2016-2017)

Results from phase 1 and 2 demonstrated that the use of NutriSTEP® in primary care practices was feasible and acceptable, and there was receptivity to explore its integration into EMRs. Phase 3 aims to explore the implementation of NutriSTEP® electronically through its integration into the EMRs of participating primary care practices.

Objectives

- 1) To explore and assess processes to support successful implementation of NutriSTEP® screening in primary care practices, and extraction of NutriSTEP® data from EMRs.
- 2) To assess the quality of NutriSTEP® and childhood heights and weights data from EMRs of children aged 18 months up to 6 years in participating primary care practices.

Methods

- Integrate the NutriSTEP® into EMR platform of primary care practices.
- Provide training and support for successful implementation.
- Extract and analyze quality of NutriSTEP® data in addition to childhood heights and weights from EMRs.
- Assess important factors for successful implementation, collection and extraction of NutriSTEP® data from EMRs.

Current Activity

- Currently working with five primary care practices to implement an EMR integrated NutriSTEP® screening tool.

Beyond BMI Research Team (2016)

- Public Health Units
- Primary Care
- BORN Ontario
- University of Guelph
- EMR Vendors
- Social Research Consulting Inc.
- Public Health Ontario
- Nutrition Resource Centre (NRC)

Contact Us

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