

# **Developing Evidence Based Screening & Assessment Tools for Targeted Populations**

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Purpose

Background

Defining Target Population

Eligibility Process

Methodology

Lessons Learned

**To provide insight to support the development of evidence based, best practice eligibility tools to better meet the needs of defined targeted populations.**

**Healthiest Babies Possible (HBP) Program**

**Reproductive Health Redesign**

**Evaluability Assessment (EA)**

## **Factors that trigger a need for change**

- ✓ Need in your community
- ✓ Evaluation of a program or service
- ✓ Limited Resources
- ✓ New Initiatives (new funding)

**EA** -defined as a systematic process that identifies if a program evaluation is justified, feasible and likely to provide useful information

## **EA Recommendations for HBP**

- Redefine target population and goal to reflect the change
- Develop an eligibility process and tools needed to reach newly defined population
- Work within the professional scope of an RD

## **What do you have to critically analyze, question or reflect upon?**

- ✓ Are you having an impact on your clients?
- ✓ Is the work within the scope of your profession?
- ✓ Are you meeting the goal of your program?
- ✓ Have your local needs changed?

## What to consider when defining your target group

- ✓ Who do you need to reach to ensure you will have the greatest impact?
- ✓ Will you be able to measure and/or evaluate outcomes that relate to the impact of your interventions?
- ✓ Is there evidence available to support the target population?

## HBP Refined Goal and Target Population

Contribute to healthy birth outcomes among pregnant women -

**at-risk** of having a LBW baby living in Toronto



**nutritionally at-risk** of having a LBW baby living in Toronto

## Clearly define Target Population

- ✓ Do all stakeholders working with this population have the same understanding of who they are?
- ✓ Are there clear and concise definitions available?

## HBP – Definition of Nutritional Risk (IOM, 1996)

1. Detrimental or abnormal nutritional conditions.
2. Documented nutritionally related medical conditions.
3. Dietary deficiencies that impair or endanger health.
4. Conditions that predispose persons to inadequate nutritional patterns or nutritionally related medical conditions.

## **Reach your target and be true to your goal**

- ✓ What kind of processes need to be in place?
- ✓ What will the criteria and process be for eligibility and how will it be determined?
- ✓ Do you have mechanisms in place to know you reached your target population?
- ✓ Is it based on evidence and best practice?

## **2 Step Eligibility Process**

Step 1 – Screening

Step 2 – Assessment

**Are there any other factors to consider for eligibility?**

## **HBP**

- **Pregnant women living in the City of Toronto**
- **Women  $\leq$  28 weeks gestation (7 months)**
- **Women with a nutritional modifiable risk factor as determined by an RD**

# Methodology

## Step 1 – Screening

### **Scan risk factors related to target population**

Environment scan of existing nutrition related tools

Literature review



### **Develop evidence based rationale/criteria**

Literature review

Expert consultation

Best practices in dietetics



## Use evidence based, best practice approach to develop criteria

### HBP

#### Rationale Criteria to Assess Risk Factors:

- A determinant with “proven or possible association with preterm birth, LBW, intrauterine growth retardation and/or SGA” (Shah & Ohlsson, 2002).
- A nutrition related risk for PTB/LBW/IUGR/SGA births in the lit review of LBW (Shah & Ohlsson, 2002).
- A nutritional risk in the Women’s Infants and Children Nutritional Risk Criteria (IOM 1996, 2001).
- Where evidence relating the risk factor to PTB/LBW/IUGR/SGA is lacking, contradictory or controversial, the risk factor is considered a nutrition modifiable risk based on best practice.

Risk Factor	WIC Nutritional Risk Criteria	Literature Review of Low Birth Weight	Inclusion Rationale
3.0 Low pre-pregnancy weight:			
3.1 Adults with a BMI < 18.5 3.2 Teens ≤ 89% ideal body weight	Use as a nutritional risk criteria.	<p>Low pre-pregnancy weight has a possible association with LBW.</p> <p>Maternal malnutrition has a proven association with LBW.</p>	<ul style="list-style-type: none"> <li>•Evidence suggests that a low pre-pregnancy weight is associated with PTB/LBW; the mechanism is not known (Shah &amp; Ohlsson, 2002).</li> <li>•Low pre-pregnancy weight is a nutritional risk during pregnancy (ADA &amp; DC, 2000 and Institute of Medicine [IOM], 1996, 2001).</li> <li>•Life long adequacy or inadequacy of nutrition is reflected in pre-pregnancy weight (Shah &amp; Ohlsson, 2002); therefore, it may be an indicator of chronic under-nutrition or maternal malnutrition.</li> </ul> <p><b>Best Practice:</b></p> <ul style="list-style-type: none"> <li>•Underweight cut-offs are Body Mass Index (BMI) &lt; 18.5 for adults (Health Canada, 2003) and ≤ 89% Ideal Body Weight (IBW) for teens (Dietitians of Canada et al., 2004).</li> <li>•Pregnancy weight refers to just prior to pregnancy or within 6 months before pregnancy.</li> <li>•See Appendix 6b: Assessing Pre-pregnancy Weight for Teens (≤ 19 years old).</li> </ul>

## Rationale for Inclusion and Exclusion of Risk Factors in the J-form Screening Tool

HBP – Toronto Public Health 2007

<http://toronto.ca/health/hbpp/hbpp.htm>

Inclusion Risk Factors

Exclusion Risk Factors



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graph TD; A[Inclusion Risk Factors] --- B[Exclusion Risk Factors]; B --- C[Develop Screening Form]; C --- D[Standardize Screening Methods]; D --- E[Pilot Test]; E --- F[Development of Assessment Tool];
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**Develop Screening Form**

**Standardize Screening Methods**

Guidelines developed to ensure consistency among staff using tool

**Pilot Test**

Screening Tool piloted (on phone and in person)

**Development of Assessment Tool**

# Pause - Review of eligibility process

## Reflect/Pause

- ✓ Are you still moving in the right direction?
- ✓ Does the work completed relate back to your goal and your target population?
- ✓ Have you missed any pertinent steps?

## HBP

- Did we include all nutrition related and modifiable risk factors?
- Did we accurately determine our eligibility factors?
- Did we open the net wide enough for screening?
- Did the pilot test help to answer these questions?

# Methodology

## Step 2 – Assessment

### Purpose of the Assessment Tool

**To confirm information obtained in the screening process in order to determine program eligibility**

Screening – opens the net

Assessment – narrows the field

**Was anything missed in the screening?**

Telephone versus in person

## Develop Assessment Form



## Standardize Assessment Methods

Guidelines developed to ensure consistency among staff using tool



## Pilot Test

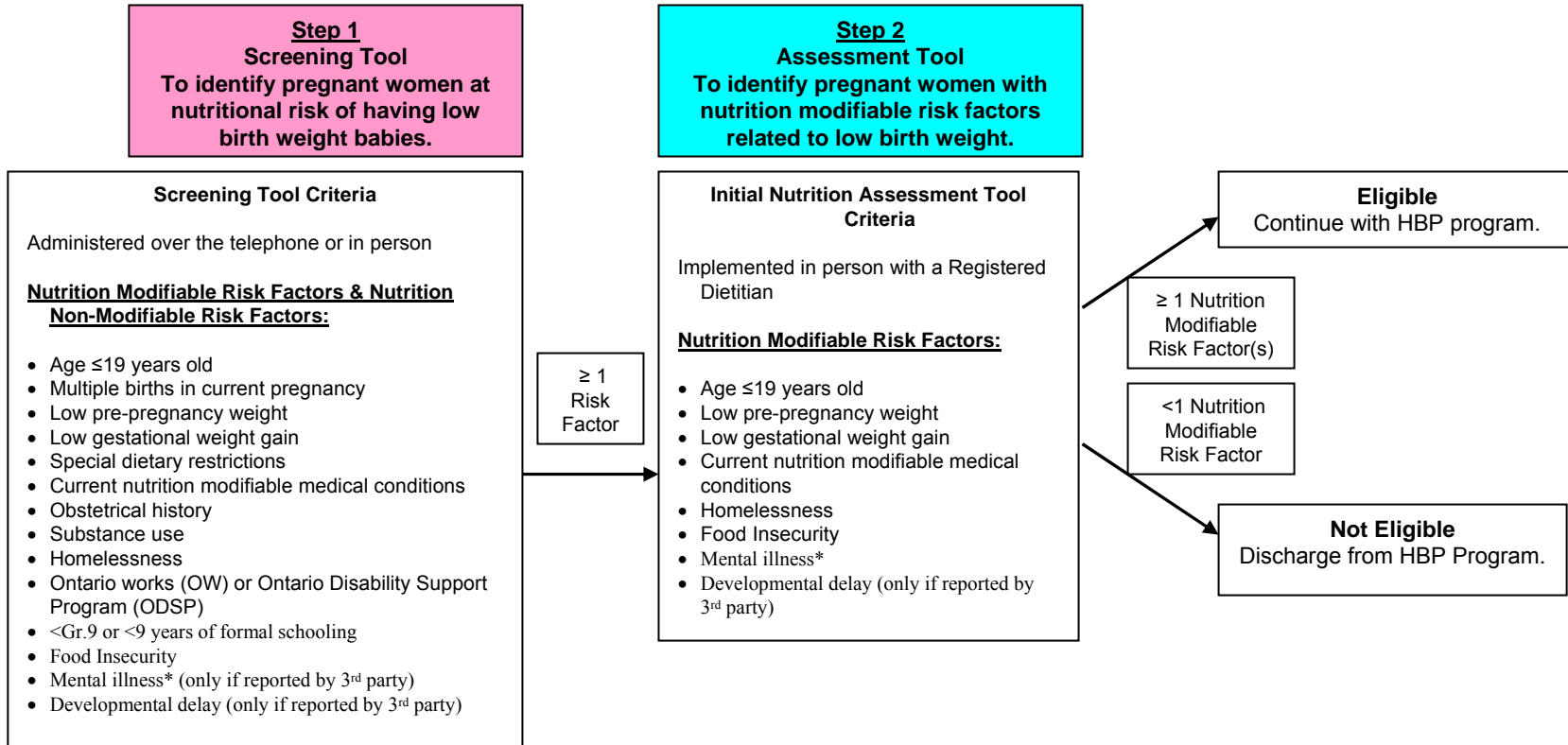
Assessment Tool piloted



## Next Steps



## Healthiest Babies Possible Eligibility Process: Screening and Initial Nutrition Assessment



\* Reported mental illness is a risk factor only if clinically diagnosed, customer is currently on or has stopped psychiatric medication for pregnancy.

**Multidisciplinary team** – evaluators, key stakeholders, decision makers

**Set your deadline for completion** - work backwards

**Invest the time up front** - environmental scans, extensive lit reviews, expert consultations, clear definitions, develop criteria, pilot test, analyze, evaluate

**Document, Document, Document**

**Adhere to scope of practice**

**Be true to your goal**

**Develop supporting documents** - create policies, procedures, guidelines, tools

**Invest in proper training**

**Communicate** – to internal and external stakeholders

**Reflect**

Questions ??

Comments ??

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