

Developing analytic guidance for infant feeding surveillance using the Locally Driven Collaborative Project Retrospective 6-Month Single Time Point Questionnaire



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Thank you, PHO!

- We thank Public Health Ontario (PHO) for its support of this project. We gratefully acknowledge funding received from PHO through the Locally Driven Collaborative Project (LDCP) program
- The LDCP program helps public health units in Ontario work together to conduct applied research and program evaluation on critical public health problems or programs
- Views expressed in this presentation are the views of the LDCP Infant Feeding Surveillance project team members and do not necessarily reflect those of PHO.

Presentation Objectives

1. To describe the current LDCP Infant Feeding Surveillance Knowledge Translation project
 - a. Stakeholder engagement activities
 - b. Development of analytic guidance resources
2. To showcase the analytic guidance resources

Background on infant feeding surveillance in Ontario

- Pursuing Baby-Friendly Initiative (BFI) designation became a requirement for public health units (PHUs) in 2011
- BFI designation requires collection and reporting of infant feeding surveillance (IFS) data from the organization's service population
- Pre-2011: wide variation across the province

LDCP IFS Pilot Study 2013-2015

- **Objective:** To work collaboratively with Ontario public health units to develop a standardized tool and method for collecting infant feeding surveillance data that will enable public health units to have *locally useful* and *externally comparable* data
- **27 of 36 PHUs were involved**
- **Project recommendations: 2 data collection tool options**
 - Prospective (multiple time point questionnaires)
 - Retrospective (6-month single time point questionnaire – aka 6MRQ)

After the IFS Pilot Study

Infant Feeding Surveillance Pilot Study FINAL REPORT AND RECOMMENDATIONS



A Locally Driven Collaborative Project
April 9, 2015

- Final report release: April 2015
- LDCP project team moved to create Provincial IFS Group
 - To continue to collaborate and discuss IFS-related issues
- A need identified for standardized analytic guidance using the LDCP tools
- Our KT project developed analytic guidance for the 6MRQ

The LDCP 6MRQ KT Project Team

- Evelyn te Nyenhuis, RN, BScN, IBCLC, Public Health Nurse (lead)
 - York Region Public Health
- Jessica Deming, MSc, Epidemiologist
 - Region of Waterloo Public Health and Emergency Services
- Sandy Dupuis, MSc, Epidemiologist
 - Niagara Region Public Health
- Erin Fuller, MPH-HP, Public Health Nurse
 - Hamilton Public Health Services
- Andrew Harris, MSc, Epidemiologist
 - Haliburton, Kawartha, Pine Ridge District Health Unit
- Deanna White, MA, Epidemiologist
 - Haldimand-Norfolk Health Unit
- Carmen Yue, MPH, Quality Improvement Specialist
 - Toronto Public Health
- Arianne Folkema, MPH, Epidemiologist
 - Region of Waterloo Public Health and Emergency Services

LDCP 6MRQ KT Project

- **Objective:** to guide users of the LDCP Retrospective 6-Month Single Time Point Questionnaire (6MRQ) to collect, analyze, report, and disseminate infant feeding surveillance data
- **Deliverables:**
 - Stakeholder engagement activities to ensure resources meet users needs
 - PHU survey
 - Analytic guidance resources

Target stakeholders

- PHU staff involved in IFS – epidemiologists, analysts, evaluators, public health nurses, and others
- Association for Public Health Epidemiologists in Ontario (APHEO)
- Provincial IFS Group

PHU survey (June 2016)

Why survey?

- To learn about PHUs' IFS strategies
- To gauge 6MRQ's acceptability
- To identify barriers/motivators for adopting 6MRQ



Who responded?

- 31 PHUs (RR=86%)
- Majority (90%) have an established IFS system

BFI designation status

- 61% designated
- 39% working on it

Use of 6MRQ

- 42% not currently/planning to use
- 58% planning or currently using
 - 32% planning
 - 26% currently

Reasons why/why not using 6MRQ

Why

Meets BFI requirements

High Quality

Flexibility

Consistency

Efficiency

Why not

Preference for prospective collection

Not compatible for online method

Missing questions

Too many questions

Inconsistent for comparisons over time

IFS implementation experiences

Successes

- Outsourcing data collection relieves pressure on PHU staff
- Conducting data collection internally allows for timely access to survey data and allows for quick changes
- Developing a standardized data collection tool is a positive step forward (but need supporting resources)

Challenges

- Decreasing/low response rate
- Concerns about recruitment and loss to follow-up
- Privacy impact assessment delays implementation timeline
- Different survey platforms adopted by PHUs sometimes fail and other IT issues
- Coordinating cross team collaboration can be difficult

2016 APHEO Workshop session

- **20 attendees**
 - All conducting IFS
 - 4 using 6MRQ
 - 5 not BFI designated
- **Objectives:**
 - To provide overview of KT project and PHU survey results
 - To do a "soft-launch" of draft analytic guidance resources
 - To facilitate discussion about experiences, challenges, needs and successes with the 6MRQ and IFS in general

Feedback: IFS and 6MRQ issues

General IFS issues

- Standardization: How we can get to standardized IFS in 5-10 years
- Comparability: Be able to compare PHU data
- Consent: different models of acquiring consent across PHUs, ethics/privacy differences
- Analysis: guidance, multiple time-points

6MRQ-specific issues

- Compliance: Does 6MRQ meet BFI requirements?
- Analysis: concerns during data cleaning stage
- Lack of standardization: reporting, still lacking comparator

Overview of resources

1. Data dictionary
2. Core indicator documents
 - a) Any breastfeeding
 - b) Exclusive breastfeeding
 - c) Breastfeeding initiation
3. Stata and SAS syntax (supplemental)
4. Revised 6MRQ tool

Data Dictionary

Appendix D: Data Dictionary for the Retrospective 6-Month Single Time Point Questionnaire

Version 2.1 Release: 20 March 2017

Variable Name	Variable Label	Question Content	Universe	Notes	Responses	Code
Q1	Consent_participate	Do you wish to participate in this survey?	All potential respondents	Acquiring consent	Yes	1
					Yes, but not now	2
					No	0
Q2	Consent_Contact	May we call you back at a later time to conduct the survey?	Respondents who consented to be contacted to complete the survey at a later time (Q1=2)	Acquiring consent	Yes	1
					No	0
Q3	Live_together	Is your baby currently living with you?	Respondents who consented to participate (Q1=1)	Determining eligibility	Yes	1
Q4	Confirm_PHU	Are you currently living in _____ Region?	Respondents who live with their baby (Q3=1)	Determining eligibility	No	0
					Yes	1
dEligible	Eligibility_Flag		Respondents who consented to participate (Q1=1) & who live with their baby (Q3=1) & currently live within the PHU region (Q4=1)	Derived variable to determine whether potential respondent is eligible to participate in survey. Variables used for derivation: Q3 and Q4. Eligible: Q3=1 and Q4=1	Eligible	1
					Not eligible	0
Q5a	Confirm_Baby_DOB	Can you confirm that your baby was born on _____ (read birthdate)?	All eligible respondents (dEligible=1)	Baby's DOB is from ISCIS. Q5a and Q5b are for data quality checks only. Q5a and Q5b mark end of consent and eligibility questions.	Yes	1
					No	0
Q5b	Baby_DOB	What is your baby's birthdate?	Respondents who answered Q5a=0	DOB must be < date of survey but >= current date - 5.5 or 6 months. Q5a and Q5b mark end of consent and eligibility questions.	YYYY/MM/DD	YYYY/MM/DD

Variable Name	Variable Label	Question Content	Universe	Notes	Responses	Code
Q6	Multiples	On this date, did you give birth to one baby or multiple babies?	All eligible respondents (dEligible=1)	First survey question - asked of all respondents who consented and were eligible to participate. Where response to Q6=1 (multiples), the entire survey from here on is to be conducted once for each baby.	Single	0
					Multiples	1

Any Breastfeeding Core Indicator

3.2.3 Any Breastfeeding Core Indicator for the Retrospective 6-Month Single Time Point Questionnaire

Description

- The proportion of infants who received human milk (including expressed milk, donor milk) with or without other liquids (e. g., water, fruit juice, formula, non-human milk) or solid foods, as of <TIME>.
 - Any breastfeeding includes both exclusive and non-exclusive breastfeeding.
 - Other liquids do not include vitamins or medications.
 - <TIME> may be equal to or less than the time point when the questionnaire was administered. A time point of 5.5 months may be used to evaluate breastfeeding rates 'at about' 6 months for Baby Friendly Initiative (BFI) purposes, as per direction from BFI Ontario². Co points for reporting to the Breastfeeding Committee for Canada include breastfeeding at 2 weeks, 2 months, 4 months, and 6 n postpartum.

Indicator and method of calculation

Specific Indicator

- Any breastfeeding as of <TIME>.

Any breastfeeding

Total number of babies who, as of <TIME>, were receiving human milk (including expressed milk, donor milk) with or without other liquids or solid foods * 100

Total number of babies for whom the survey was completed

Any breastfeeding

Total number of babies who, as of <TIME>, were receiving human milk (including expressed milk, donor milk) with or without other liquids or solid foods * 100

Total number of babies for whom the survey was completed

Data notes

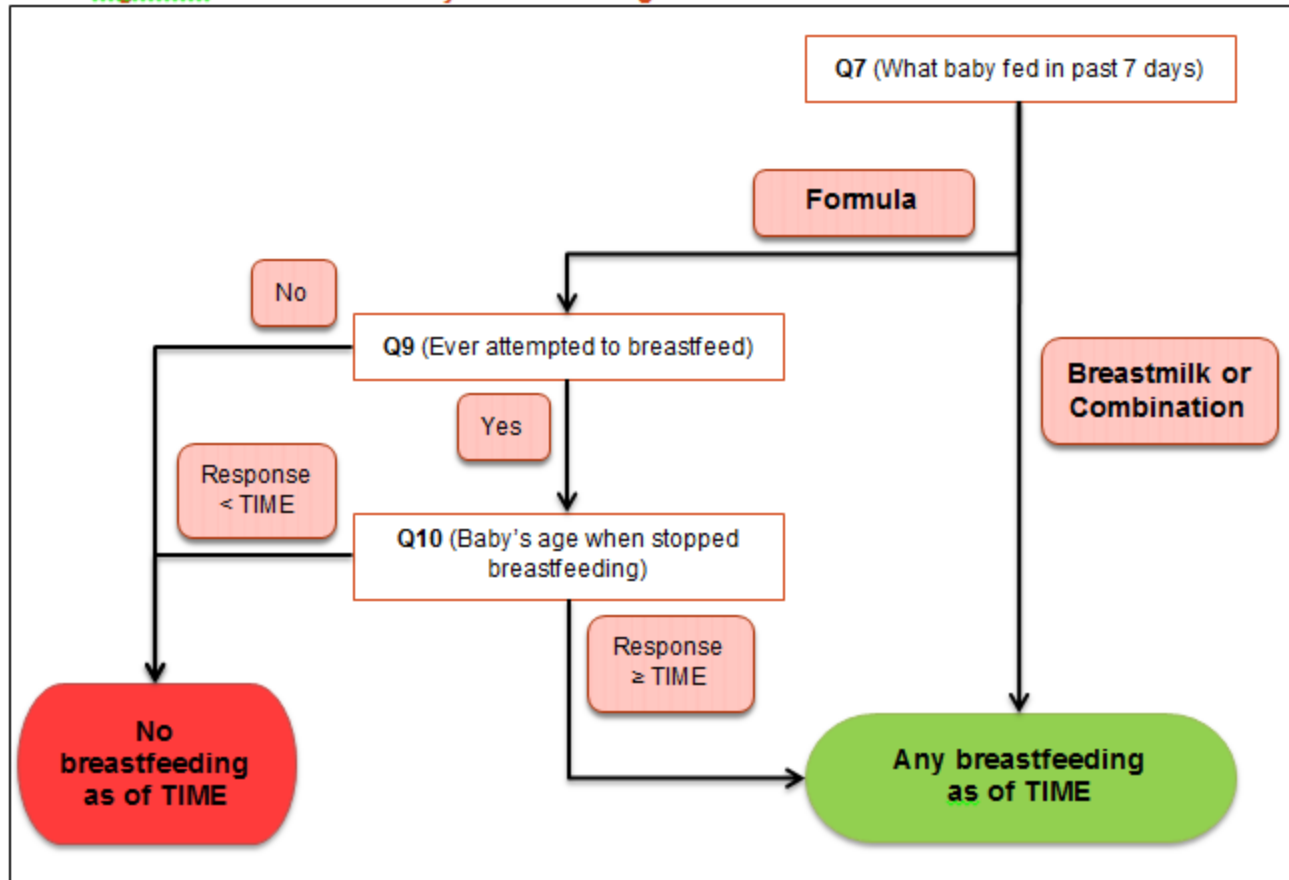
1. To evaluate breastfeeding rates at about 6 months, a time point of 5.5 months may be used.²
2. The numerator includes both exclusive and non-exclusive breastfeeding.
3. Refer to the derived variable **eligible** in Retrospective 6-Month Single Time Point Questionnaire data dictionary for inclusion criteria.

Mandatory reporting requirement

- For BFI designation at the community level, community health services are required to record data on entry to their service and a minimum of two additional time frames (e. g., 2 or 4 months) and up to 6 months ('at about' 6 months²).

Any Breastfeeding Core Indicator

Figure 2. Flowchart for any breastfeeding indicator calculation



Note: Only questions and response options relevant to this indicator are depicted.
TIME may be equal to or less than the time point when the questionnaire was administered.

Revising the 6MRQ tool

- Added as a result of stakeholder feedback
- Current 6MRQ users raised concerns about issues/limitations of the tool
- We:
 - Collected and consolidated all feedback
 - Discussed each issue in detail
 - Sought to minimize changes to tool
 - Summarized decisions
 - Developed a revised version of 6MRQ (English only)

Limitations of the 6MRQ

- Not intended to and cannot meet all BFI surveillance requirements:
 - Entry to service
 - Breastfeeding duration beyond 6 months
 - Total breastfeeding rates
- Project timelines vs. imminent need of PHU users for analytic guidance
- 6MRQ and other LDCCP recommendations have been customized by many individual PHUs

Future steps

- Formal release of final report and resources in early May on PHO website
- Future knowledge exchange activities
 - Provincial BFI Expo (May 4 & 5)
 - BCC National BFI Expo (Sept. 2017)
- Note: another LDCCP KT project for prospective data collection has launched
 - Anticipated project completion in spring 2018

Thank you! Questions?

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