

# A MULTI-INSTITUTIONAL APPROACH TO IMPROVING MATERNAL & FETAL HEALTH

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## PROBLEM STATEMENT

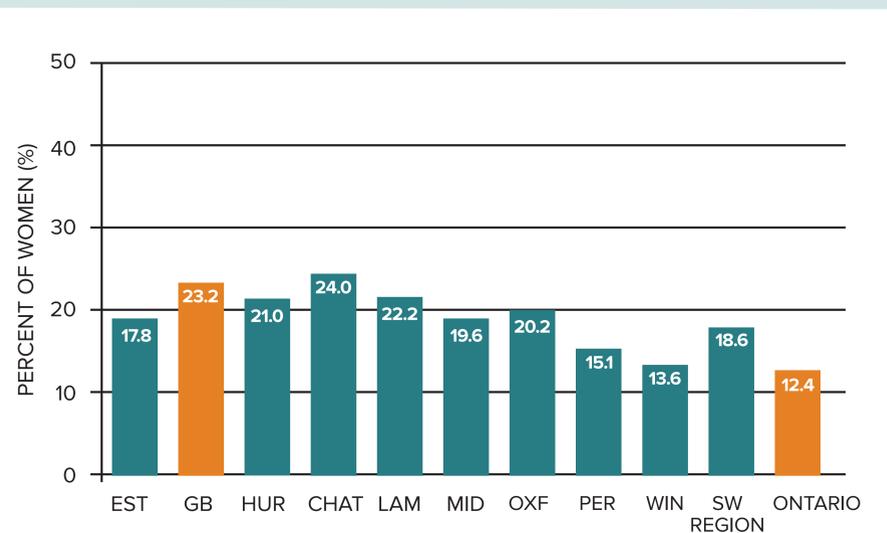
Better Outcome Registry and Network (BORN) for Ontario is a database that provides characterization and quantification of antenatal health.

BORN data for Grey Bruce area indicated higher than average incidence of:

- Obesity
- Teenage pregnancy
- Antenatal Smoking
- Lack of support for postpartum depression

## ANECDOTE

Proportion of women who smoked cigarettes during pregnancy, by Public Health Unit, South West Region, 2008



Source: Better Outcomes Registry and Network (BORN) Ontario 2008

**Rates of smoking during pregnancy increased with decreasing maternal age – 44.8% of mothers under the age of 20 smoked during pregnancy South West Region of Ontario – BORN, 2008**

## EXECUTIVE TRAINING FOR RESEARCH APPLICATION (EXTRA)

- ▶ Program offered by Canadian Foundation for Healthcare Improvement; authors accepted into program
- ▶ Vision: To build leaders in utilizing evidence to guide policy development & decision making in healthcare
- ▶ 14 month fellowship: team based
- ▶ Intervention project : To engage team in a change strategy; to utilize research based evidence; to focus on a specific issue.

## CONTEXT: SMOKING CESSATION



Serves a population of 160,000; mandated to address the issue of smoking cessation related to population health with \$350,000 of budget provided by smoke free Ontario program.



Includes 6 hospitals that provide acute health care to Grey Bruce area. Owen Sound hospital is the only site that provides obstetrical care. Smoking cessation identified as a priority in strategic plan. As of May 31, 2014 smoking is prohibited on all GBHS property.



Serves 35,000 patients; trained clinical pharmacist & RN in smoking cessation counseling. Participating in Smoking Treatment for Ontario patients (STOP) program.

## PERFORMANCE IMPROVEMENT INTERVENTION

- ▶ Vision: 100% Referral rate to smoking cessation counseling within the Owen Sound Family Health Team
- ▶ Goal: to coordinate efforts across a continuum of health care providers from vertical silos to horizontal flow of service provision
- ▶ To make use of available resources (STOP, smoker's helpline)

## CRITICAL SUMMARY OF EVIDENCE

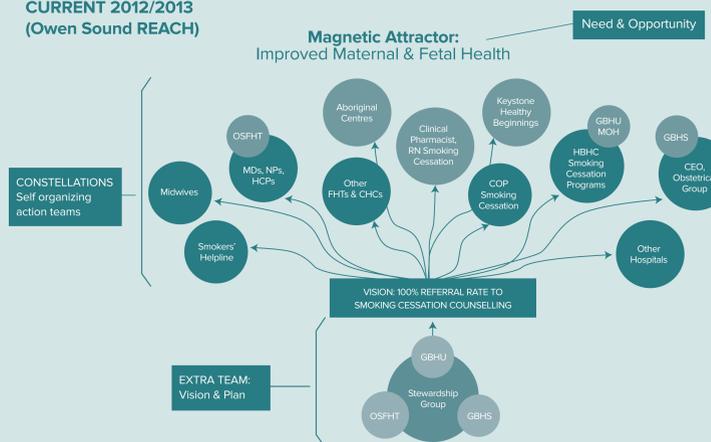
- ▶ ACOG and SOGC strongly endorse obstetricians Being involved in smoking cessation programs
- ▶ For every dollar invested in smoking cessation programs, \$3 are saved in downstream health-related costs (Ruger, et al. Value Health. 2008 Mar-Apr;11(2):180-90)
- ▶ Smoking cessation promotion has a positive impact on pregnancy and fetus - less risk of complications (Lumley J. et al. Cochrane Database of Systematic Reviews, 3, 2009)
- ▶ Neonatal care for infants born to smoking mothers: costs an extra \$700 (Adams et al: Health Econ 2002)

## CHANGE MANAGEMENT PROCESS

CONSTELLATION MODEL OF COLLABORATIVE CHANGE

(Suman, T&M, 2008)

CURRENT 2012/2013 (Owen Sound REACH)



## RESULTS: PROVIDER INITIATED REFERRALS TO SMOKING CESSATION COUNSELLING

TIME FRAME	IDENTIFIED ANTENATAL SMOKERS IN EMR	# PROVIDER INITIATED REFERRALS	# NO SHOW AND/OR NO RESPONSE
2010		0	
2011		2	
JAN-AUG 2012	30	2 (6.7%)	
SEPT 2012- JAN 2013	43	16 (37.2%)	7
FEB-MAR 2013	6	1 (16.7%)	
APR-DEC 2013	28	14 (50%)	8
JAN-APR 2014	29	13 (44.8%)	4
MAY-JUN 2014	18	8 (44.4%)	4

\*\* PRE EXTRA IP

## LESSON LEARNED

- ▶ Communication: accountability about results, purpose of project to HCPs, MDs must be ongoing
- ▶ Simplicity: electronic referral process; no additional forms to use
- ▶ Trigger: EMR message reminder to refer for smoking cessation counselling; highlighted antenatal form to identify smokers; reminder to identify smoking status
- ▶ Multifactorial interventions: consider alternative forms of communication (twitter, media) for a younger population
- ▶ Partnerships: develop with local agencies, engage them in the process to create momentum for change

## IMPLICATIONS FOR POLICY

- ▶ Template checklist developed with list of essential elements to implement project
- ▶ Project adaptable to each institution's resources to avoid any restructuring
- ▶ Clinician engagement critical
- ▶ Optimization of EMR resources for simplicity and time efficiency
- ▶ Accountable care: improving patient care with long term healthcare savings

## NEXT STEPS

- ▶ Partnership with Keystone Child, Youth & Family Services, host to Healthy Beginnings (CPNC) sessions for teenage pregnant families
  - Fall 2014 "lunch & learn" joint pilot project by OSFHT clinical pharmacist to address stress management & smoking cessation with interested clients (with or without partners); captive audience with food, transportation provided
  - 3 sessions/year planned
  - Smoking cessation "swag" donated by GBHU

- ▶ RNAO Best Practice Champions for Smoke-Free Pregnancies Workshop in Fall 2014 hosted by GBHU

- ▶ Electronic pre/postnatal resource document - developing (OSFHT)

- ▶ Preliminary development of contraception pamphlet for patients (within 3 institutions); consistent messaging

## FOR ADDITIONAL INFORMATION PLEASE CONTACT

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