

# Care Gaps and Opportunities to Improve Risk Reduction Strategies of Women Diagnosed with Gestational Diabetes in Centre Wellington

T Fitter, RD, CDE<sup>1</sup>, A Waugh, RD, CDE<sup>2</sup>, P Brauer, PhD, RD, FDC<sup>3</sup>, D Royall, MSc, RD<sup>4</sup>  
<sup>1</sup>Groves Memorial Community Hospital, <sup>2</sup>Upper Grand Family Health Team, <sup>3</sup>University of Guelph, <sup>4</sup>Nutrition Research Consulting

## OBJECTIVES

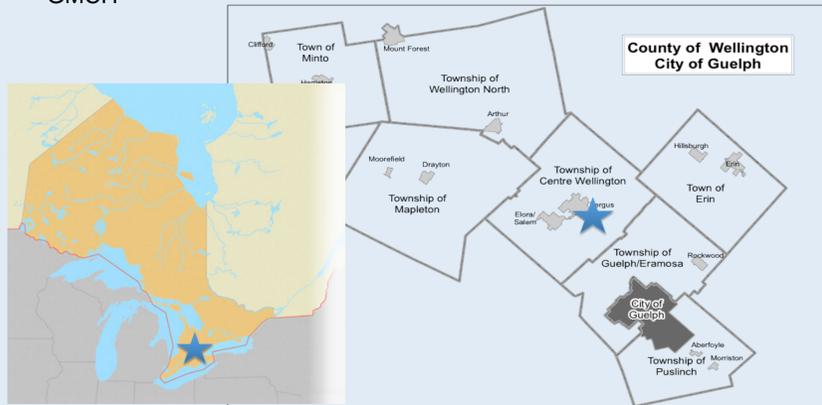
- To identify gaps in care for women with gestational diabetes (GDM) cared for jointly by a primary care Family Health Team (FHT) and tertiary Diabetes Education Centre (DEC)
- To develop strategies to optimize risk reduction of type 2 diabetes (T2DM)

## RATIONALE

- Incidence of GDM is 3-7% (non-aboriginal population), 6-12% in overweight women
- Potential significant increase in prevalence with adoption of new ADA screening criteria
- Overweight women have 2-fold increased risk of subsequent development of T2DM
- Perceived gap in compliance/ordering of post partum oral glucose tolerance test (OGTT) reflects rates of 20-45% seen in literature
- FHT has opportunity with increased capacity in primary care, to address/promote healthy lifestyle interventions & risk reduction strategies for this at-risk population, and optimize use of electronic medical records (EMR)

## METHODOLOGY

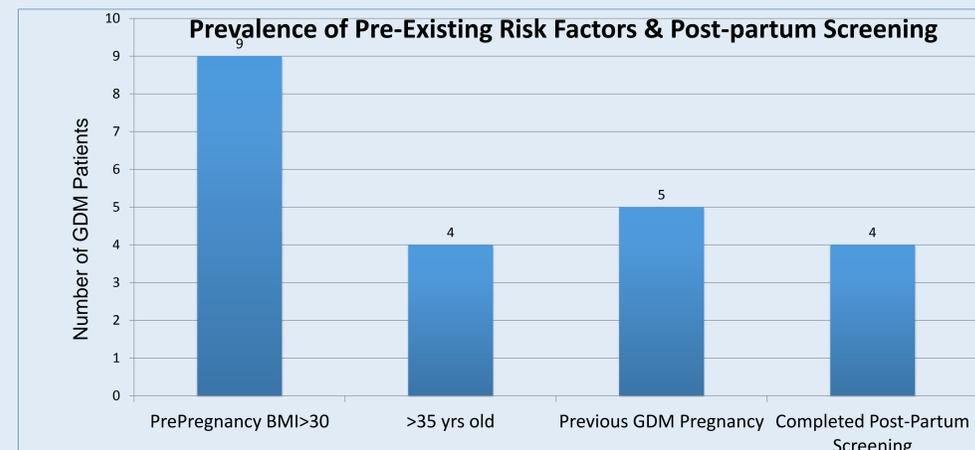
- Upper Grand Family Health Team (UGFHT) & Groves Memorial Community Hospital (GMCH), Centre Wellington, Ont. (rural SW Ontario, 27,000 people)
- Retrospective chart audit Apr 1, 2007- Mar 31, 2010
- Inclusion criteria:
  - Women who delivered at GMCH
  - Diagnosis of GDM in current pregnancy
- Primary care EMR audited for post-partum glucose screening, and for use of EMR to flag women/infants for future screening
- Standard form created, pilot-tested and completed by staff in both centres
- Ethics approval by Research Ethics Boards of University of Guelph and GMCH



## RESULTS

➤ Prevalence of GDM was 2% as per chart audit of all deliveries Apr '07- Mar '10

Category	Parameter	Summary of Results and Comments (n=20)
Prenatal Screening Practices	50 gm Screen Completed	16 (80%) completed → 15 (94%) of those, required to complete 75 gm OGTT → 8 (53%) completed recommended care path
	Week Gestation Requisition Given (mean)	24 weeks
	Lag time to complete screen (mean)	29 days + additional 34.3 day lag time to complete 75 gm OGTT if necessary = 63 days to diagnose GDM
Prenatal Care	Referred for Care: • Patients complied ◦ Treated – Diet only ◦ Treated – Insulin & Diet • Untreated	17 (85%) referred • 14 (82%) complied ◦ 4 (28%) ◦ 11 (78%) • 5 (25%)
Delivery Outcomes	Macrosomia	3 (15%)
	Low birth weight (LBW)	4 (20%)
	Shoulder Dystocia	1 (5%)
	Screened for Neonatal Hypoglycemia	18 (90%) → 55% of those infants screened had hypoglycemia
	Preeclampsia	2 (2% incidence)
	Gestational Age at Delivery (mean)	38.5 weeks
Delivery Methods	Vaginal	7 (35%)
	C-Section Planned	2 (10%)
	C-Section By Necessity	11 (55%)
Post Partum Care	Counselled to complete screening	14 (70%) → of those only 28% completed screening → 50% remained dysglycemic post partum
	GDM noted on EMR	Only 10 (50%) of women had documentation on EMR Profile of having had GDM pregnancy, (* None of offspring had documentation)
	Breastfeeding upon Discharge (D/C)	17 (85%) of moms were breastfeeding at D/C from labour & delivery
	Documentation of Post Partum Risk of T2DM	Only 4 (25%) of women had documentation within 6 months post partum of counselling on risk reduction strategies.



## IMPLICATIONS

- GDM prevalence was less than expected and prenatal screening rate was high, but not universal. There was a significant lag in diagnosis.
- Under utilization of EMR at prenatal visits to screen those at risk of GDM that may benefit from access to lifestyle management to decrease risk of GDM/T2DM prior to OGTT at 28 weeks
- Standardized carepath has potential to reduce peri-natal complications
- Significant gap in post-partum screening resulting in missed opportunity to prevent/manage future burden of T2DM
- Opportunities to maximize use of primary care/FHT for post-partum screening
- Lack of surveillance of off-spring who are at increased risk of T2DM/obesity

## CONCLUSIONS

### Next Steps for our community:

- Create child-friendly lab environment
- Utilize EMR to optimize care: reminders, GDM flags, tagged to offspring, linked to Allied Health Professional (AHP) referral, etc.
- Increase communication between patient and Primary Care Provider (PCP) for prenatal/pre-conception counselling
- Increase communication between delivery centres, midwives, PCPs/FHTs
- Develop GDM care path to close gaps
- Maximize use of community partners for post partum programming

## LIMITATIONS

The results and specific issues identified are not generalizable to other communities in Canada due to the relatively small base prevalence of GDM in this rural, largely Caucasian community.

## ACKNOWLEDGEMENTS

This study was funded in part by a grant from the Public Health Agency of Canada.