

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

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OBJECTIVES

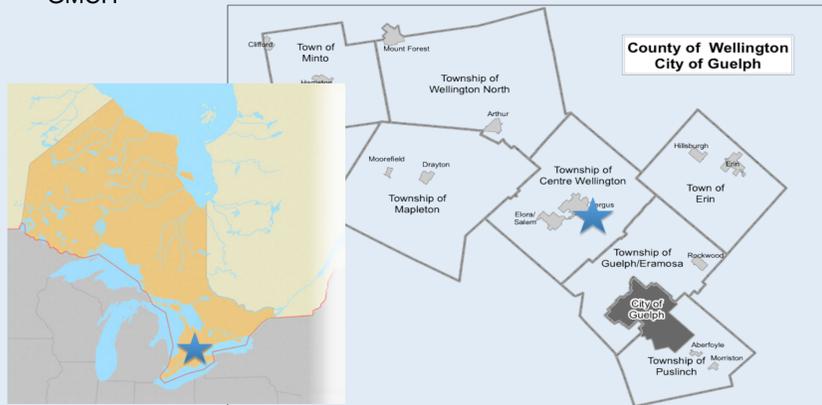
- To identify gaps in care for women with gestational diabetes (GDM) cared for jointly by a primary care Family Health Team (FHT) and tertiary Diabetes Education Centre (DEC)
- To develop strategies to optimize risk reduction of type 2 diabetes (T2DM)

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

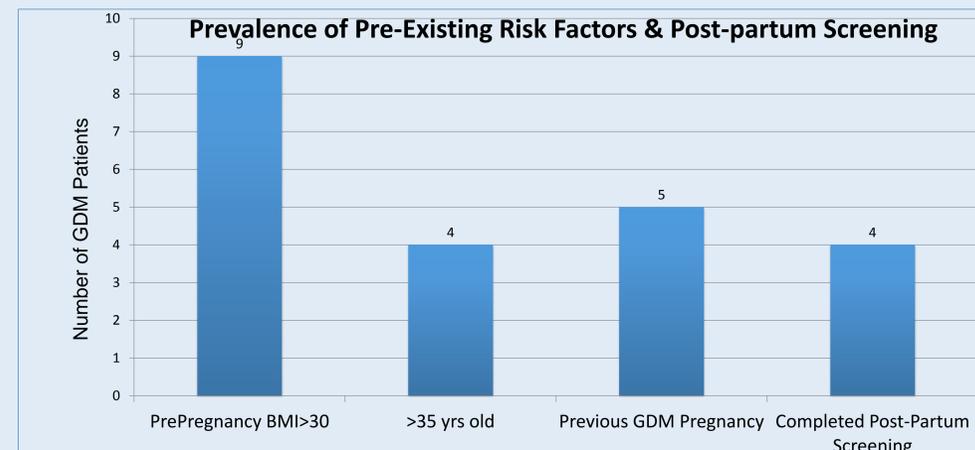
- Upper Grand Family Health Team (UGFHT) & Groves Memorial Community Hospital (GMCH), Centre Wellington, Ont. (rural SW Ontario, 27,000 people)
- Retrospective chart audit Apr 1, 2007- Mar 31, 2010
- Inclusion criteria:
 - Women who delivered at GMCH
 - Diagnosis of GDM in current pregnancy
- Primary 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

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