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Title

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Completion of Postpartum Glucose Testing in Women with Gestational Diabetes with a 6-week vs 2- to 3-week Postpartum Visit: Preliminary Results



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INTRODUCTION

- About 2-10% of all pregnancies are affected by gestational diabetes mellitus (GDM)¹
- Women with GDM are 7x more likely to develop type 2 diabetes mellitus compared to those without GDM within 10 years after delivery²
- ADA and ACOG recommend glucose testing at 4-12 weeks after delivery to identify women with diabetes or impaired glucose metabolism³
- Postpartum glucose screening rates in women with GDM remains strikingly low at 3.4%-38%⁴
- Scheduling an earlier postpartum visit resulted in higher attendance rates; however, there is limited data on how an earlier postpartum visit may impact rates of postpartum glucose testing⁵

OBJECTIVES

- **Primary objective:** Compare completion of glucose testing within 4-12 weeks among women who were scheduled for 6-week versus a 2- to 3-week routine postpartum appointment
- **Secondary objectives:** Compare completion of glucose testing within 12 months in both groups
- **Hypothesis:** An earlier routine follow-up visit leads to higher rates of glucose testing

MATERIALS & METHODS

- Retrospective chart review of all deliveries at UCDMC between 6/2014– 6/2016. IRB approved.
- Inclusion: GDM, 18 years or older, received prenatal care in OB/GYN department
- Exclusion: Known T1DM, T2DM or multiple deliveries within timeframe
- Statistics: T-test, Fisher’s exact test, or Chi-Squared test; as appropriate

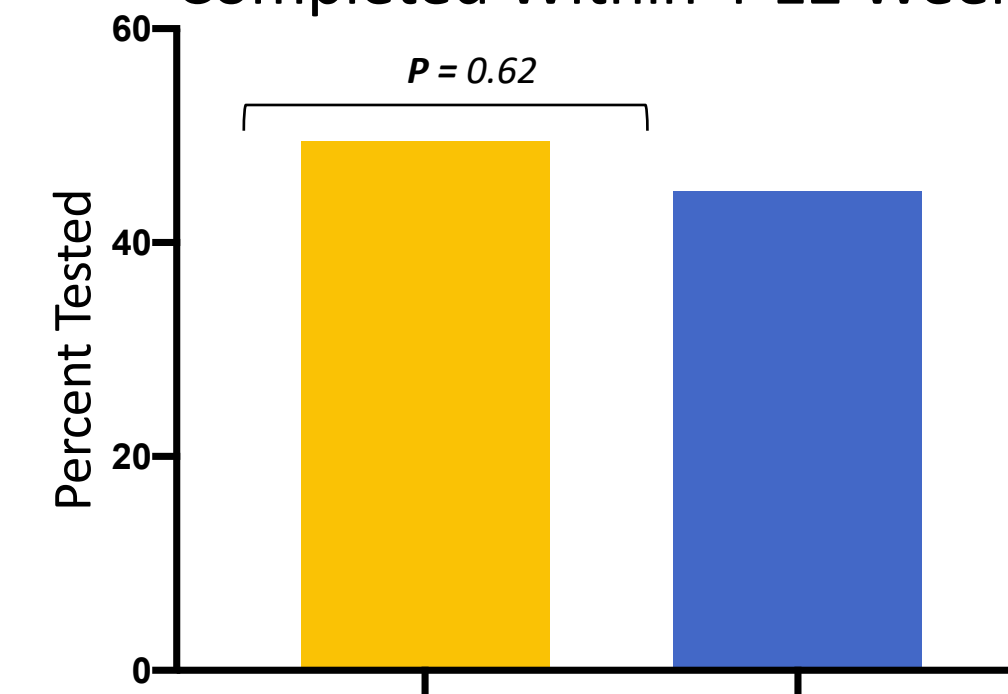
RESULTS

- 1940 charts reviewed: 161 (8.3%) met inclusion criteria
 - 103 (64.0%) scheduled for 6-week visit
 - 58 (36.0%) scheduled for 2- to 3-week visit.
- Overall
 - 77 (47.8%) completed postpartum glucose testing within 4-12 weeks after delivery
 - 62 (38.5%) completed postpartum glucose testing within 12 months after delivery
 - 22 (13.7%) did not complete postpartum glucose testing

Demographics for patients included in either the 6-week or 2- to 3-week return visit cohort

	6-Week Visit (n=103)	2- to 3-Week Visit (n=58)	P-value
Age (years)	33.25 ± 5.72	33.09 ± 5.21	0.86
Gravidity			0.52
1	24 (23%)	9 (16%)	
2	31 (30%)	18 (31%)	
3	20 (19%)	11 (19%)	
4	13 (13%)	5 (9%)	
5	8 (8%)	8 (14%)	
6 or more	7 (7%)	7 (12%)	
Parity			0.94
0	28 (27%)	14 (24%)	
1	40 (39%)	22 (38%)	
2	22 (21%)	13 (22%)	
3 or more	13 (13%)	9 (16%)	
Prior miscarriage	31 (30%)	26 (45%)	0.08
Prior abortion	38 (37%)	25 (43%)	0.40

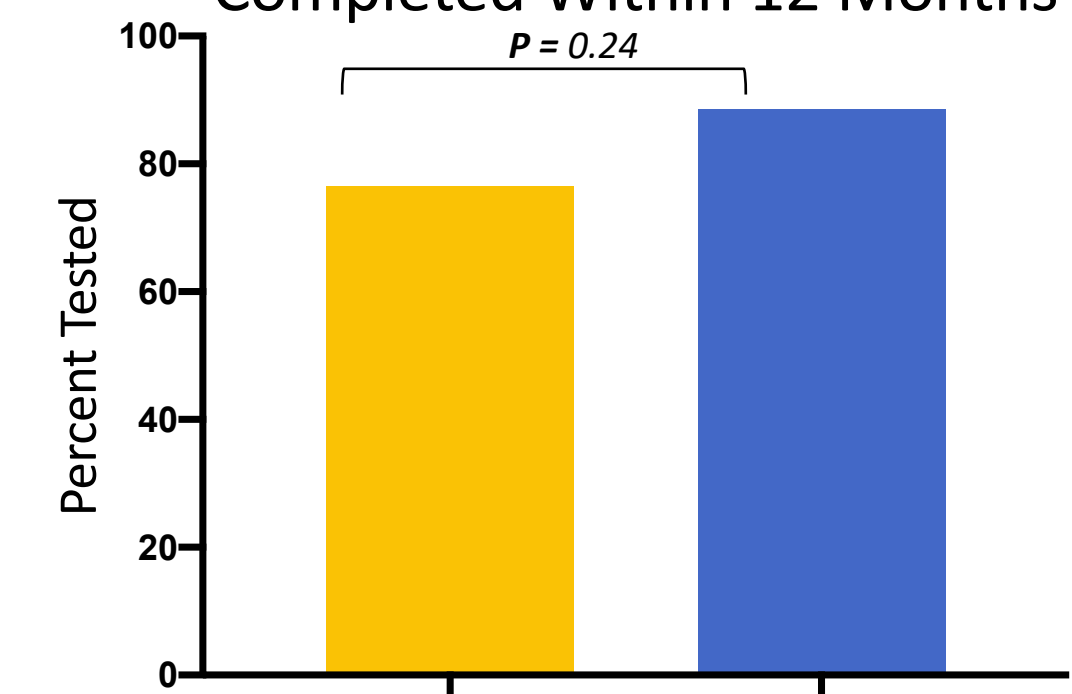
Postpartum Glucose Test Completed Within 4-12 Weeks



6-Week Visit 2- to 3-Week Visit

- 51/103 (49.5%) in 6-week group
- 26/58 (44.8%) in 2- to 3-week group

Postpartum Glucose Test Completed Within 12 Months



6-Week Visit 2- to 3-Week Visit

- 39/51 (76.5%) in 6-week group
- 23/26 (88.5%) in 2- to 3-week group

CONCLUSION

- Scheduling an earlier postpartum visit does not increase completion of postpartum glucose testing among women with GDM
- Other factors (e.g. transportation, childcare) need to be explored to facilitate completion of postpartum glucose screening

REFERENCES

1. Centers for Disease Control (2017). Gestational Diabetes. Accessed January 15, 2019. <https://www.cdc.gov/diabetes/basics/gestational.html>
2. Bellamy, Leanne, et al. "Type 2 diabetes mellitus after gestational diabetes: a systematic review and meta-analysis." *The Lancet* 373.9677 (2009): 1773-1779.
3. Tovar, Alison, et al. "Peer reviewed: postpartum screening for diabetes among women with a history of gestational diabetes mellitus." *Preventing chronic disease* 8.6 (2011).
4. Kim, Catherine, et al. "Missed opportunities for type 2 diabetes mellitus screening among women with a history of gestational diabetes mellitus." *American Journal of Public Health* 96.9 (2006): 1643-1648.
5. Chen, Melissa J., et al. "Comparing postpartum visit attendance with a scheduled 2-to 3-week or 6-week visit after delivery." *American journal of perinatology* 36.09 (2019): 936-942.