



Establishing a Basis for Implementation of a Patient-Centered Intervention for Improvement of Gestational Diabetes Follow-Up at University of Colorado Hospital



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Background

- Diabetes has become a national epidemic with 4,110 Americans are diagnosed with diabetes every day (Bullard et al., 2018).
- Individuals diagnosed with gestational diabetes (GDM) in pregnancy are several times more likely to develop type 2 diabetes following delivery than those that did not have gestational diabetes.
 - Women with a GDM diagnosis have been designated by the CDC as high risk of developing T2DM and are recommended to receive close glycemic monitoring and counseling regarding lifestyle modification strategies (Center for Disease Control and Prevention, n.d.; Metzger et al., 2007).
- Despite their high risk status, between 33% and 50% of women with GDM across several hospital studies were lost to postpartum follow up and were further unlikely to receive recommended glycemic monitoring and management (Eggleston et al., 2016).
 - A similar study assessing compliance with postpartum glycemic testing for patients with GDM has not been performed at the University of Colorado Hospital.
- Early diagnosis of T2DM can mitigate some of the cumulative morbidity of the disease so it is critical that patients are tested for persistent glucose tolerance in the postpartum period and continue to receive regular monitoring from there on.

Objective

- Assess postpartum glycemic testing compliance rates and patient perception of barriers to compliance for patients diagnosed with GDM that delivered at the University of Colorado Hospital.

Methods

- Retrospective chart review to determine rate of compliance at UCH
- Create and administer patient survey to assess patient barriers to compliance

Phase 1

- Attempted to mine data regarding patient compliance with postpartum glycemic testing and patient demographics in collaboration with COMPASS
- Ultimately had to limit scope to basic inclusion criteria
- Result: Patients that delivered at the University of Colorado Hospital between 2012 and 2014 had a postpartum glycemic testing compliance rate of 20%

Phase 2

1. Did your OB provider recommend a repeat glucose test after your baby was born? Yes/No/Unsure
2. Did anyone tell you not to eat before the glucose test? Yes/No/don't remember
3. Did anyone help you schedule the glucose test? Yes/No/unsure
4. Did you face any challenges in completing the postpartum glucose challenge test? Please choose all that apply.
 - I didn't face any challenges in completing the test
 - I was worried about cost
 - I was scared I would be diagnosed with Diabetes
 - I didn't have childcare
 - I didn't have a ride to the clinic
 - I felt sick when I drank the glucose the first time (eg nausea, vomiting, light headedness)
 - I didn't want to not eat for 8 hours
 - I didn't know that this was important/necessary
 - I forgot about the appointment
 - I was overwhelmed with my baby's needs
 - It takes too long. I didn't want to sit in clinic for 2 hours
 - I didn't have an appointment and was turned away
 - I was not instructed on how to complete it
 - Other _____
5. Typically, we ask that patients come to the OB clinic 6 weeks after birth. During this visit, we ask that you perform a glucose challenge test. This means that after not eating for 8 hours, you drink the glucose and then we draw your blood (once before the glucose and 2 hours after). Instead of coming to the clinic, how willing would you be to:

	That would be awesome!	Ok, I'd do that	No thanks	I hate that idea
a. Drink the glucose and prick your finger at home (6 weeks after baby)				
b. Drink the glucose and have a nurse come to my house to draw my blood (6 weeks after baby)				
c. Not drink the glucose. Prick your finger to check your blood sugar at home (12 weeks after baby)				
d. Not drink the glucose. Have a nurse come to my home and draw my blood (12 weeks after baby)				
e. Not drink the glucose. Come to the clinic/lab to get my blood drawn (12 weeks after baby)				
6. Did anyone educate you on how to avoid getting diabetes after your pregnancy? Yes/No/can't remember
7. Did anyone tell you how frequently you should be tested for diabetes after pregnancy? Yes/No/can't remember

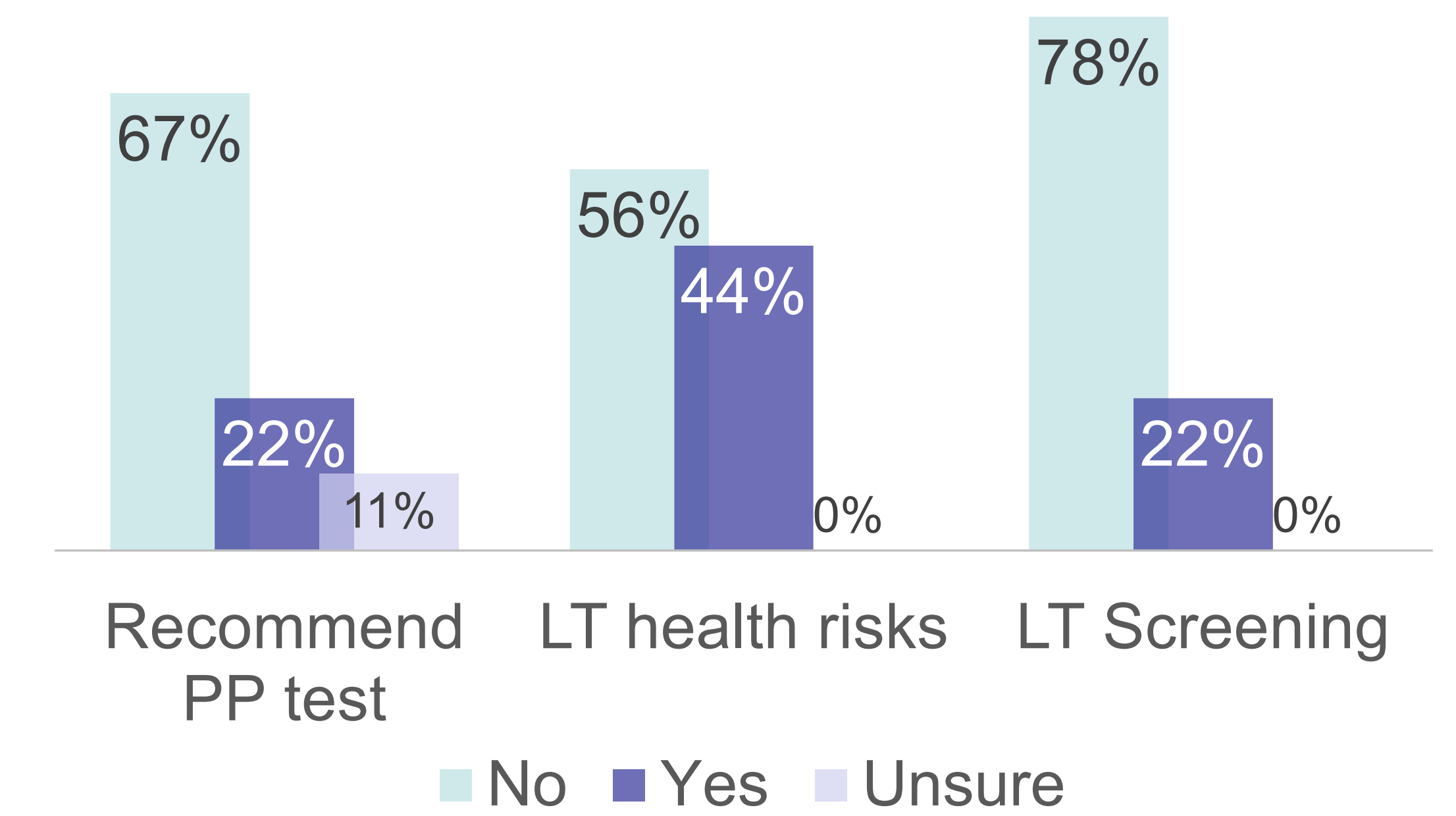


Table 1. Recommended PP Test: Did your OB provider recommend a repeat glucose test after your baby was born?
 LT (long-term) health risks: Did anyone explain how to avoid getting diabetes after your pregnancy was over?
 LT Screening: Did anyone tell you how often you should be tested for diabetes after your pregnancy

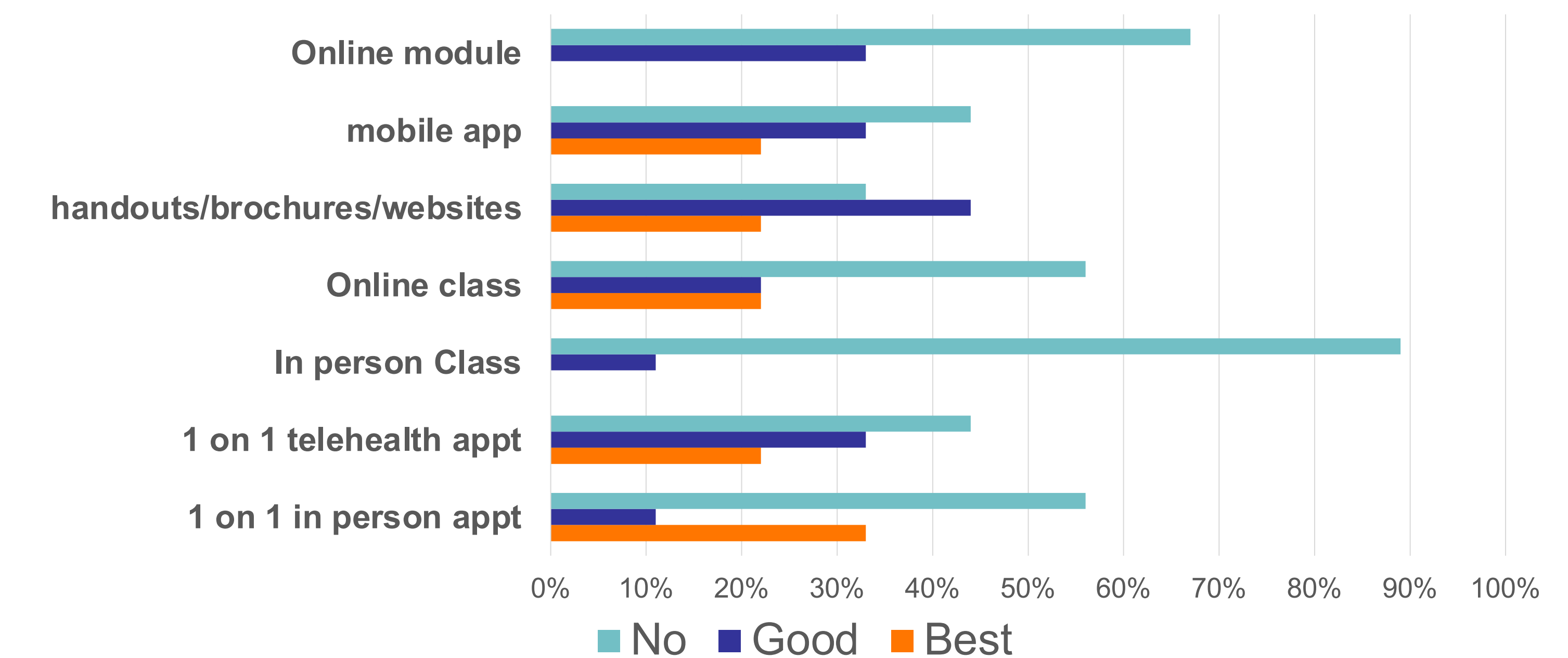


Figure 2. Survey Responses: How would you like to receive GDM health risk education?

Conclusions

- UCH has similarly poor, if not worse, PP glycemic testing compliance when compared to the rest of the country
- While we hypothesized that many patients were not aware of the long-term risks of a GDM diagnosis, we were surprised to find that 2 out of every 3 participants didn't recall having been told they needed any postpartum glycemic testing at all.
- Next Step: Patient education intervention

References

Bullard, K. M., Cowie, C. C., Lessem, S. E., Saydah, S. H., Menke, A., Geiss, L. S., Orchard, T. J., Rolka, D. B., & Imperatore, G. (2018). Prevalence of Diagnosed Diabetes in Adults by Diabetes Type — United States, 2016. *MMWR. Morbidity and Mortality Weekly Report*, 67(12), 359–361. <https://doi.org/10.15585/mmwr.mm6712a2>

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Eggleston, E. M., Lecates, R. F., Zhang, F., Wharam, J. F., Ross-Degnan, D., & Oken, E. (2016). Variation in Postpartum Glycemic Screening in Women With a History of Gestational Diabetes Mellitus. *Obstetrics & Gynecology*, 128(1), 159–167. <https://doi.org/10.1097/aog.0000000000001467>