

# Targeted Postpartum Breastfeeding Intervention to Improve Lactation Outcomes in Women Affected by Gestational Diabetes Mellitus

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## Introduction

- The long-term epigenetic sequelae associated with gestational diabetes mellitus (GDM) are serious and costly
- Transgenerational issue - both mom and baby at risk for long-term health risks
- Breastfeeding, greater in duration and intensity, can mitigate the adverse metabolic risks and decrease future maternal transition to Type 2 diabetes mellitus by 35-50%
- Women affected by GDM have poorer breastfeeding outcomes compared to their normoglycemic counterparts

## Objective

- To determine if educating lactation-certified providers to deliver a postpartum targeted breastfeeding intervention to mothers diagnosed with GDM can improve breastfeeding outcomes at 2, 8 and 16-weeks

## Methods

- **Design:** Pretest/Posttest design
- **Setting:** 670,000 member integrated healthcare system in the Rocky Mountain Region

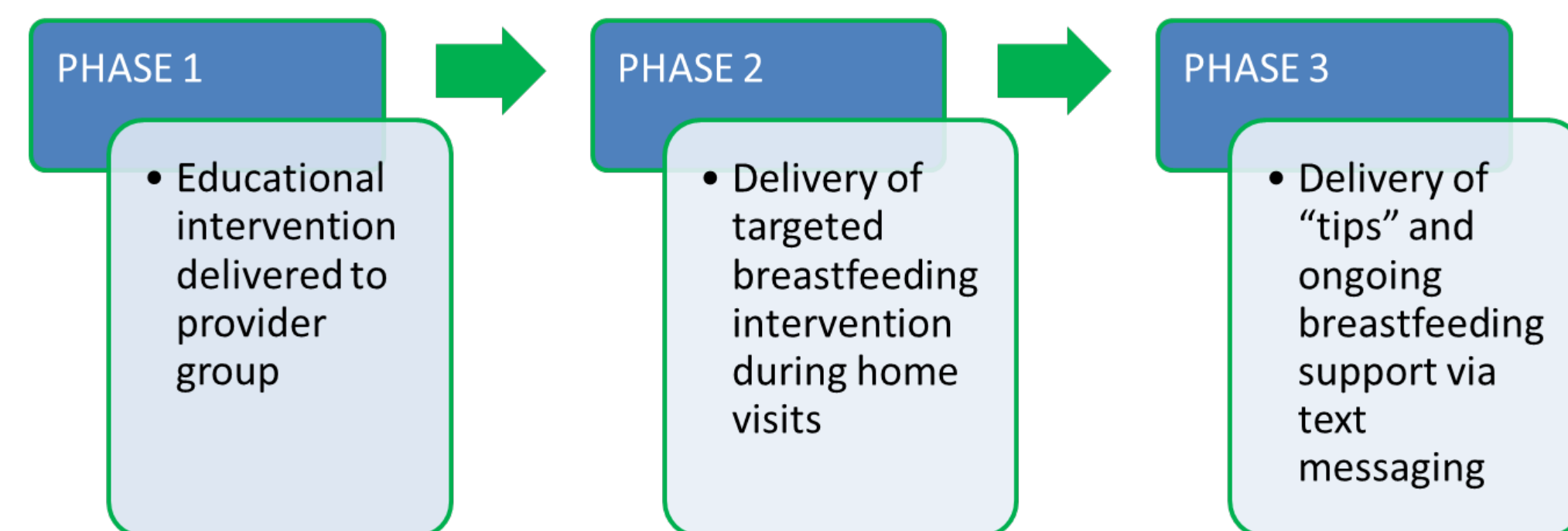
### Sampling:

#### Provider Group N=19:

- Fixed sample of NP's/CNM's employed in a perinatal transitional program (all lactation certified)

#### Participant Group N=41:

- **Inclusion:** Postpartum women with GDM in current or past pregnancy providing any breastmilk to their infant at time of hospital discharge
- **Exclusion:** Previous Type 1 or Type 2 DM diagnosis, formula feeding only and non-English speaking



## Results

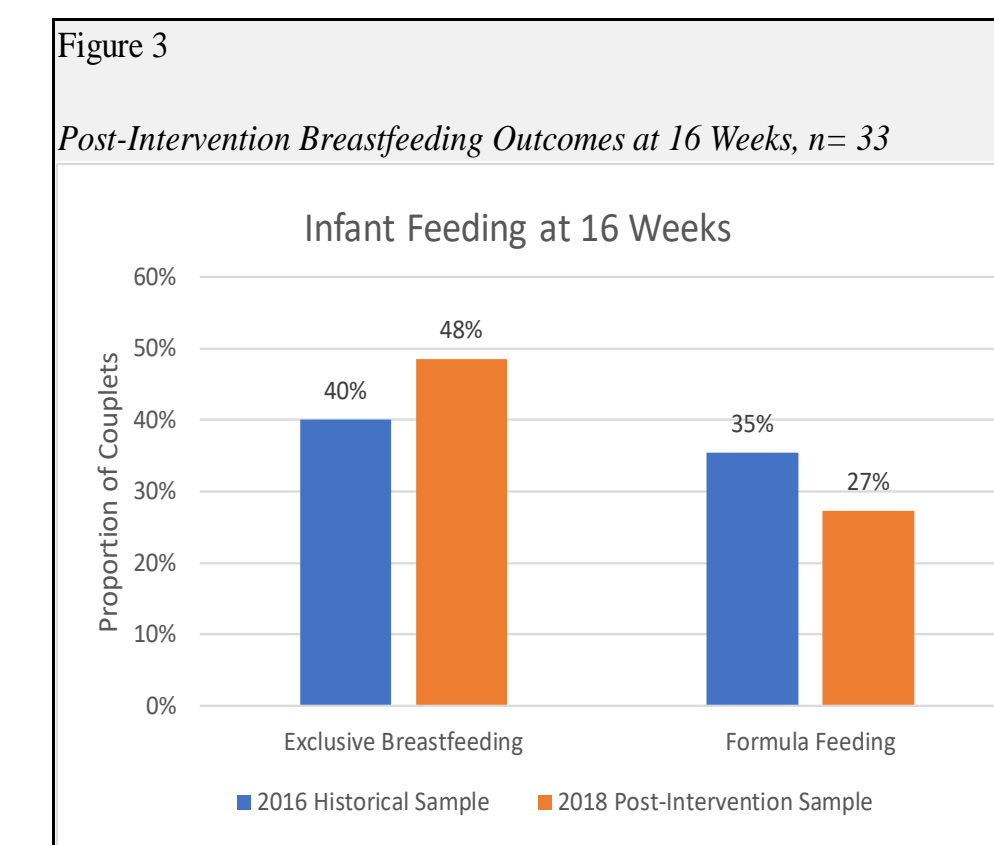
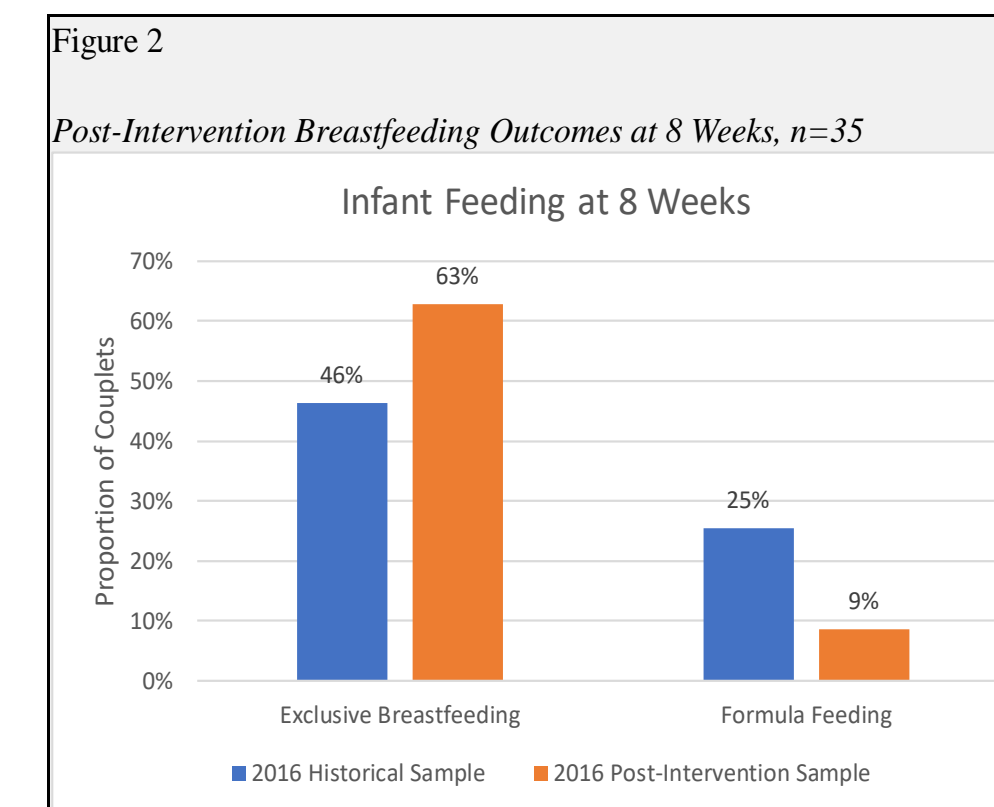
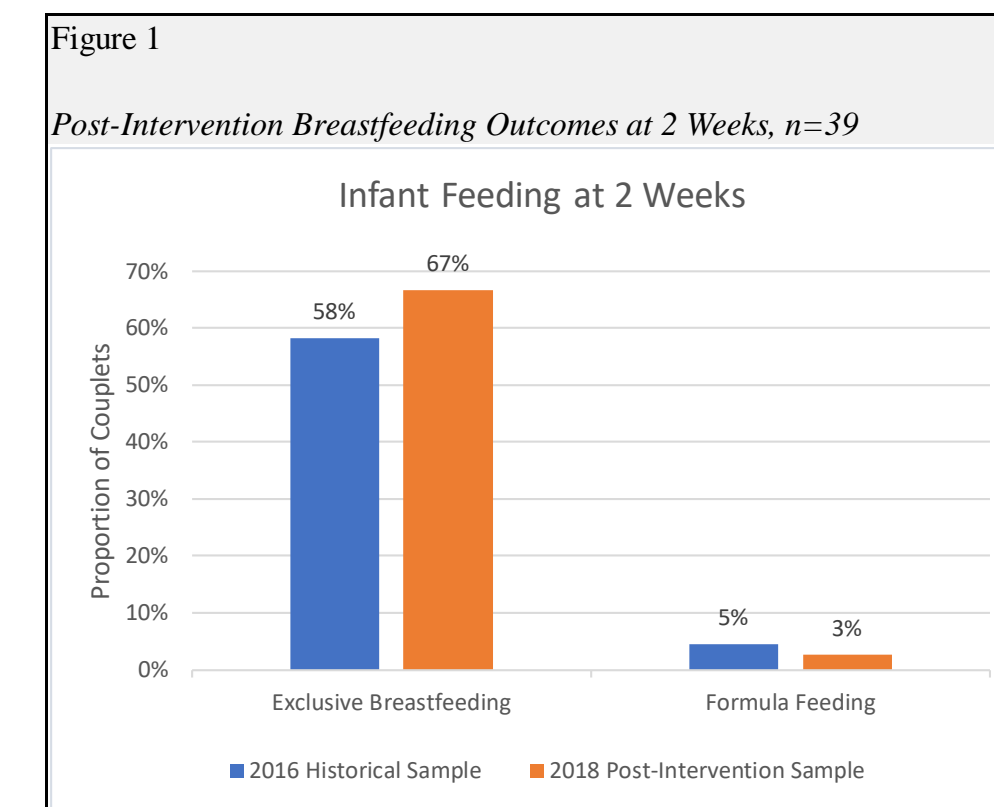


Table 5  
Change In Breastfeeding Duration and Intensity Post Targeted GDM Breastfeeding Intervention, N=41

	2 Weeks		8 Weeks		16 Weeks	
	Baseline	Post	Baseline	Post	Baseline	Post
Exclusive (%) <sup>a</sup>	58.2	66.7	46.4	62.8	40.0	48.5
Predominant (%) <sup>b</sup>	24.6	23.0	17.3	14.3	14.5	6.1
Partial (%) <sup>c</sup>	12.7	7.7	10.9	14.3	10.0	18.1
Formula (%) <sup>d</sup>	4.5	2.6	25.4	8.6	35.5	27.3
% Change From Baseline						
Exclusive		+14.6		+35.3		+21.3
Predominant		-6.5		-17.3		-58.0
Partial		-39.4		+31.2		+81.0
Formula		-42.2 <sup>e</sup>		-66.1 <sup>e</sup>		-23.1 <sup>e</sup>
Chi Square (df)		39.7 (3)		27.1 (3)		14.0 (3)
p-value <sup>f</sup>		p<.001		p<.001		p<.003

Note: GDM = Gestational Diabetes Mellitus, Baseline indicates 2016 historical data  
<sup>a</sup>100% breastmilk  
<sup>b</sup>Greater than 50% breastmilk  
<sup>c</sup>Less than 50% breastmilk  
<sup>d</sup>100% formula  
<sup>e</sup>Indicates less formula given compared to baseline (in %)  
<sup>f</sup>Statistical significance when p≤.05

## Conclusions

- Targeted postpartum breastfeeding intervention delivered by lactation-trained providers can improve breastfeeding outcomes in women with GDM
- Results significant given the transgenerational impact of GDM and need for effective interventions throughout the lifespan to address diabetes crisis
- Education of healthcare professionals caring for GDM patients in both prenatal and postpartum periods key
- **Impact Factor: Raising awareness!**

## References

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