

# Improving Participant Retention through an Evidence-Based Retention Model



Sydney Hineline, MPH<sup>a</sup>, Andrea Meisman, MA, CCRP<sup>a</sup>, Kelly Wilson, PhD<sup>b</sup>, MCHES, Whitney Garney, PhD<sup>b</sup>, Caitlin Holden, PhD, CHES<sup>®b</sup>, Brittany L. Rosen, PhD, MEd, CHES<sup>®a,c</sup>

<sup>a</sup> Division of Adolescent and Transition Medicine, Cincinnati Children's Hospital Medical Center (CCHMC), <sup>b</sup> Texas A&M University, <sup>c</sup> Department of Pediatrics, University of Cincinnati College of Medicine

## Background and Purpose

- Challenges exist when collecting evaluation data remotely at multiple time points from middle school-aged youth.
- Analyze the difference in retention rates based on the implementation of an evidence-based retention model (**E**ngagement, **V**erification, **M**aintenance, **C**onfirmation; EVMC)<sup>1</sup> by comparing retention rates for sites with and without EVMC.

## Methods

### Curriculum:

- Using the Connect (UTC) is a game-based curriculum designed to decrease adolescent pregnancy.

### Participants & Setting:

- Middle school-aged youth (10-14 years old) in schools and community-based organizations.

### Data Collection & Survey Time Points:

- Youth accessed the first survey via QR code. Follow-up surveys were sent via text, email, or mail based on participant access.

Phase 1 (n=53)	Phase 2 (n=111) <sup>a</sup>
Pre Survey (baseline)	Pre Survey (baseline)
Post Survey (immediately after program)	Post Survey (immediately after program)
2 Month Follow-Up Survey	3-Month Follow-Up Survey
	9-Month Follow-Up Survey <sup>b</sup>

<sup>a</sup>Number of participants in phase 2 who reached their 3-month follow-up time point.  
<sup>b</sup>47 participants have reached their 9-month follow-up time point in phase 2.

### EVMC:

- Our team adopted the evidence-based retention model EVMC for certain sites in Phase 2, to improve participant retention during post-intervention data collection.<sup>1</sup>

#### Engagement

- Collect detailed contact information at enrollment, including cell phone numbers, e-mails, and mailing addresses.

#### Verification

- Collect phone numbers and emails of trusted adults as secondary contacts.

#### Maintenance

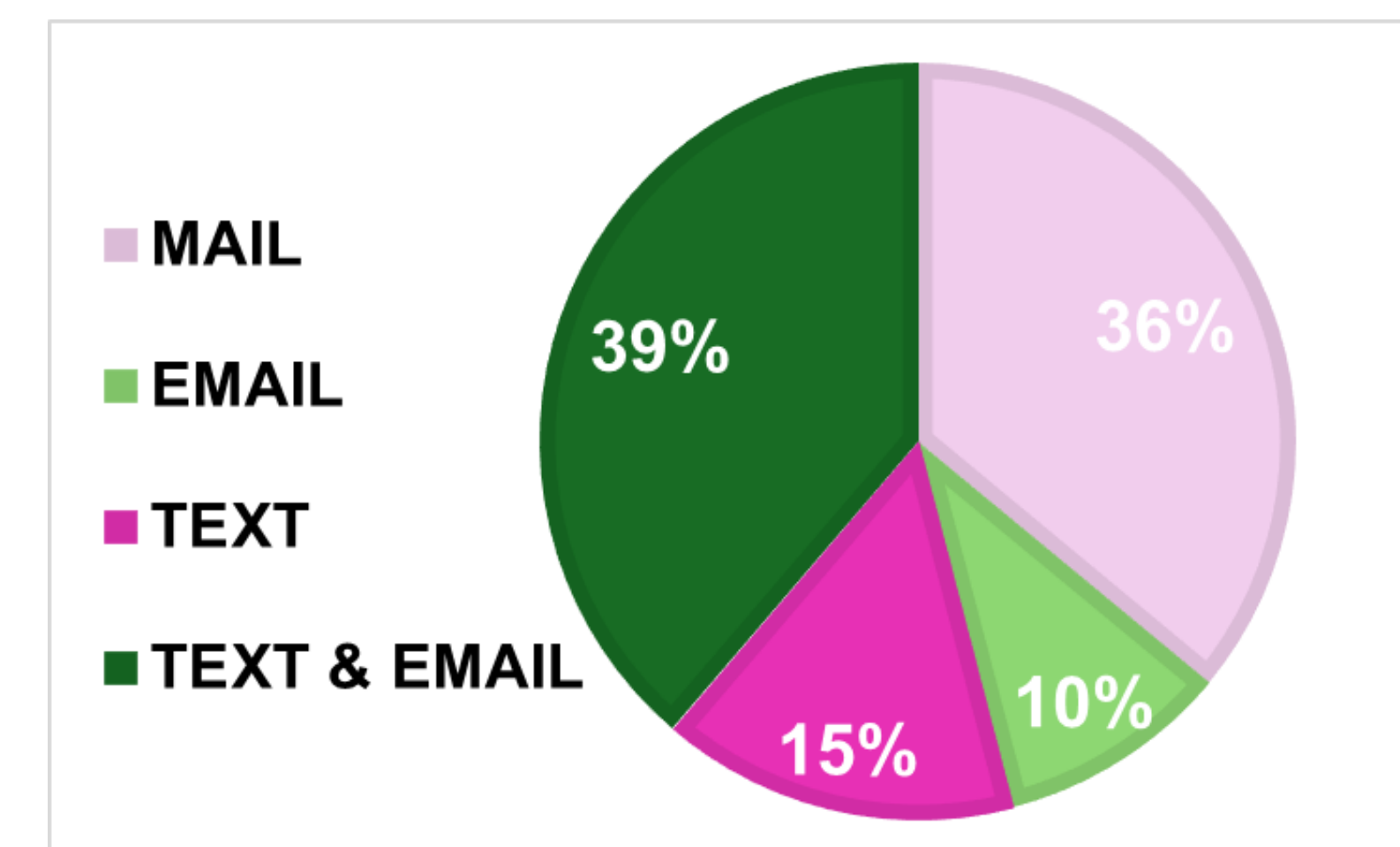
- Maintain communication with youth in between study activities with monthly texts/emails.

#### Confirmation

- Confirming contact information after each survey and via monthly texts/emails.

## Results

**Figure 1: Phase 2 Participants Access to Communication Methods at Baseline (n=111)**



- With the EVMC model, participants have a personalized communication plan to contact youth for follow-up.
- Participants receive a survey link and code via text message, email or mail (*figure 1*).
- The EVMC model allows the study team to confirm access throughout the study.

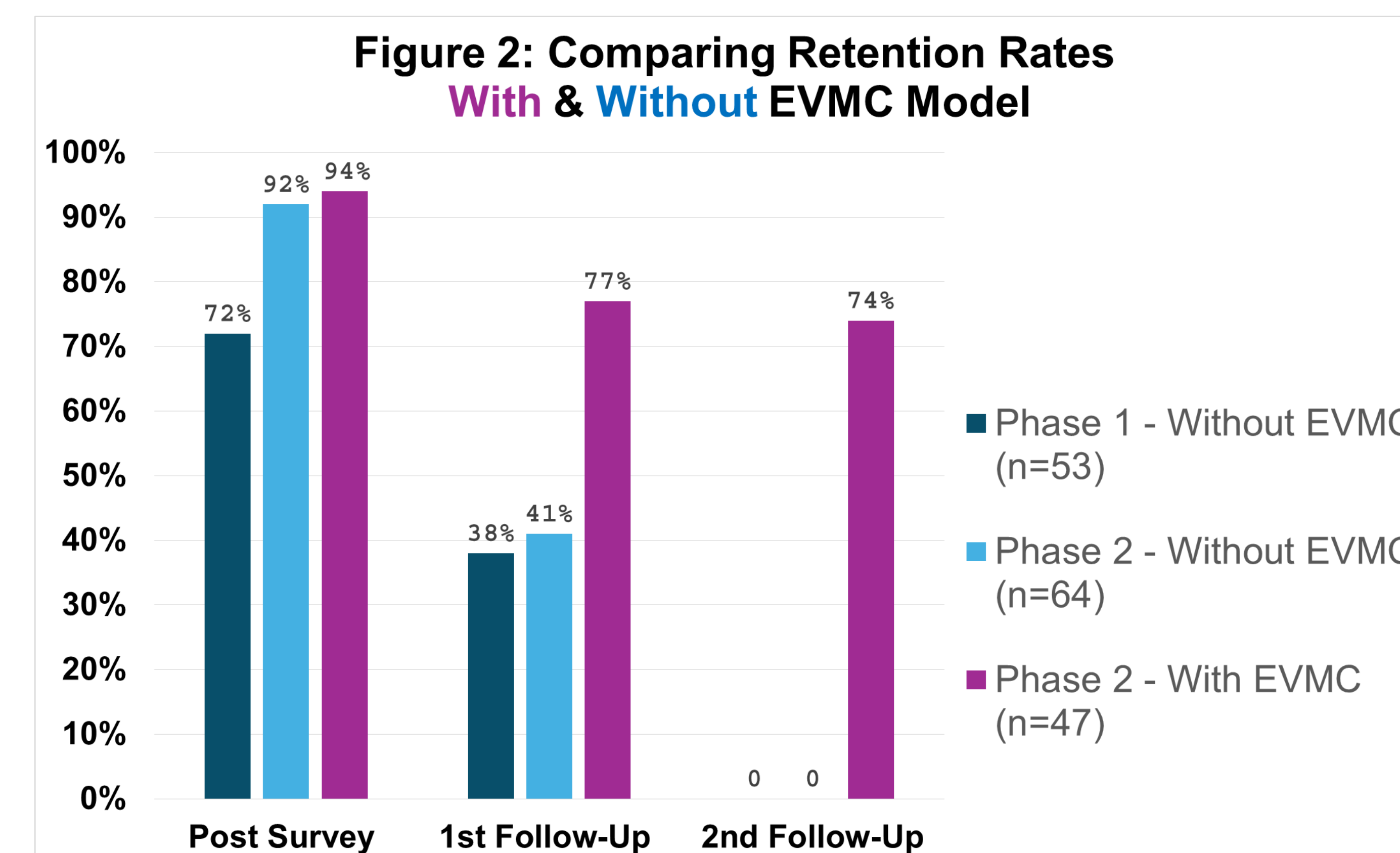
**TABLE 1: Retention Rates By Communication Method**

PHASE 1 - Without EVMC (n=53)			PHASE 2 - Without EVMC (n=64)			PHASE 2 - With EVMC (n=47)		
Communication Method	1 <sup>st</sup> Follow-Up Survey Completion Rate		Communication Method	1 <sup>st</sup> Follow-Up Survey Completion Rate		Communication Method	1 <sup>st</sup> Follow-Up Survey Completion Rate	
Mailed (n=14)	3 (21%)		Mailed (n=35)	15 (43%)		Mailed (n=7)	7 (100%)	
Emailed (n=7)	1 (14%)		Emailed (n=4)	0 (0%)		Emailed (n=5)	4 (80%)	
Texted (n=32)	16 (50%)		Texted (n=25)	11 (44%)		Texted (n=35)	33 (94%)	

- With the implementation of the EVMC model, retention increased for both the post survey and 1st follow-up survey (*Figure 2*).

- With the implementation of the EVMC model, retention for the follow-up survey increased for all communication methods (*Table 1*).

- The EVMC model is promising when looking at the high retention rates for the 2<sup>nd</sup> follow-up survey (*Figure 2*).



## References

- Davis E, Demby H, Jenner LW, Gregory A, Broussard M. Adapting an evidence-based model to retain adolescent study participants in longitudinal research. *Eval Program Plann.* 2016;54:102-11. doi: 10.1016/j.evalprogplan.2015.10.003.



## Conclusions & Future Directions

- The EVMC model provides an evidence-based guide with feasible solutions to meet retention goals.
- It is important to follow up with participants to determine if their communication access changes throughout the 9-month study.
- A longer retention timeline is needed and will occur at 9-month follow-up for Phase 2 participants without EVMC.

## Sources of Support

- This work was supported by the U.S Department of Health and Human Services, Administration for Children and Families, Family and Youth Services Bureau (90AP2702-01-00; MPI: Wilson / Garney / Rosen).
- This study was registered at clinicaltrials.gov with the identifier NCT05927194.